DÆDALUS

JOURNAL OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

UPSALA COLLEGE LIBRARY
East Orange, NJ 07019
AUG 21 1984
PERIODICALS DEPARTMENT

Anticipations

J. David Bolter
Alan Brinkley
Carol Gilligan
Stanley Hoffmann
Richard Marius
Donald N. McCloskey
Joshua Meyrowitz
Janice Radway
Robert Scott Root-Bernstein
Victor F. Weisskopf

SUMMER 1984 $5.00

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BOARD OF EDITORS:

David Apter, Daniel Bell, Isaiah Berlin, François Bourricaud, Herman Feshbach, Paul Freund, Clifford Geertz, Gerald Holton, Charles P. Kindleberger, Hans H. Landsberg, Martin Meyerson, Steven Muller, Carl E. Schorske, Judith N. Shklar, Jean Starobinski, Lewis Thomas, Robert Wilson

STEPHEN R. GRAUBARD
Editor of the Academy and of Dædalus

MARIE GOLDSTEIN
Manuscript Editor

KARYN ESIELONIS
Editorial Assistant

LAURA AYR
Editorial Assistant

J. RUTH TAYLOR
Subscription Fulfillment Manager

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

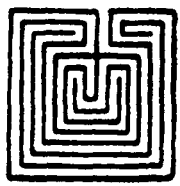
DÆDALUS

JOURNAL OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

Anticipations

Summer 1984

Issued as VOLUME 113, NUMBER 3, of the Proceedings
of the American Academy of Arts and Sciences



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Summer 1984: Anticipations. Issued as Volume 113, Number 3, of the Proceedings of the American Academy of Arts and Sciences

Copyright © 1984 by the American Academy of Arts and Sciences

Library of Congress Catalog Card Number 12-30299

Editorial Offices: Dædalus, *Norton's Woods, 136 Irving Street, Cambridge, Massachusetts 02138*

Dædalus (ISSN 0011-5266) *is published quarterly by the American Academy of Arts and Sciences. Subscription rate: $16, one year; $24.00, two years; $32.00 , three years.*

All subscriptions and single copy orders and change of address information must be sent in writing *to the* Dædalus *Business Office, P.O. Box 515, Canton, Massachusetts 02021, U.S.A. (Tel) 617-828-8450. Orders for single copies must be accompanied with prepayment of $5.00.*

Printed in the United States of America
Printing Office: 2901 Byrdhill Road, Richmond, Virginia

Second-class postage paid at Canton, Massachusetts, and at additional mailing offices.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Contents

v Preface

J. David Bolter
1 Artificial Intelligence

Joshua Meyrowitz
19 The Adultlike Child and the Childlike Adult: Socialization in an Electronic Age

Janice Radway
49 Interpretive Communities and Variable Literacies: The Functions of Romance Reading

Carol Gilligan
75 The Conquistador and the Dark Continent: Reflections on the Psychology of Love

Donald N. McCloskey
97 The Literary Character of Economics

Alan Brinkley
121 Writing the History of Contemporary America: Dilemmas and Challenges

Richard Marius
143 Musings on the Mysteries of the American South

Victor F. Weisskopf
177 The Frontiers and Limits of Science

Robert Scott Root-Bernstein
197 Creative Process as a Unifying Theme of Human Cultures

Stanley Hoffmann
221 Cries and Whimpers: Thoughts on West European-American Relations in the 1980s

253 Notes on Contributors

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Preface to the Issue, "Anticipations"

FIRST, A FEW WORDS TO EXPLAIN the meaning of the title of this issue of *Daedalus*. As those who read the journal regularly know, our practice generally is to devote each issue to a single subject, to explore that subject in depth. Occasionally, however, we publish issues that feature essays on disparate themes, believing that the practice offers an opportunity to publish articles that could not otherwise be accommodated in *Daedalus*. "Anticipations" is such a collection, but with a significant difference. In every instance we have published essays on subjects we would like to pursue further; in several cases, plans are already underway to do so, continuing dialogues already started in *Daedalus*. In some cases, however, we are in the very early stages of our inquiry; we need the reactions of our readers, so that we may judge whether the subject has interest for them, whether it ought to be pursued. Indeed, nothing could be more useful to us than to know from those who are interested how they would have us proceed.

Artificial intelligence is a subject that commands enthusiasm from its more ardent advocates, while raising substantial criticism from those who are more reserved about its future potentialities. A *Daedalus* issue on the subject would, it is hoped, bring the several camps together, not so much to create a "phony peace" between them as to establish the nature of the differences that exist, that have significance for both public policy and intellectual discourse.

Artificial intelligence, at this moment, is a subject that generates a great deal of heat and some very high-pitched rhetoric. It would be useful to discover whether another kind of discussion, more civil and more measured, is also possible, and whether it could contribute toward settling at least some of the kinds of issues that J. David Bolter alludes to in the first essay in this volume. No one, certainly, would think to quarrel with Bolter when he writes, "Surely, our con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

temporary task is to come to terms with the new electronic technology, a task that permits neither a complete rejection nor blind acceptance of the computer metaphor." That artificial intelligence will one day lose its "messianic quality," becoming simply one more theme in the history of science and philosophy, is perhaps a more controversial proposition. In any case, the question of what is likely to happen in the interim, and how we are to test both the claims of those who see vast potentialities for artificial intelligence and those who dismiss such claims as utopian fantasy, ought to be confronted. It is more than a prophecy that is at stake; the question of the nature of human intelligence—of mind itself—is at issue.

Daedalus, in its issue on "Print Culture and Video Culture," (Fall 1982) addressed a great variety of questions that touch on the importance today of these vast, growing, and competing systems of communication. To claim, as Joshua Meyrowitz does, that there is in contemporary culture an "overall merging of childhood and adulthood," and that this development owes much to the electronic media, which are available to the masses in a way that reading never can be, takes for granted both the ubiquitous quality and the power of these new visual media. The alternative proposition, that circumstances—national, regional, social, religious, political, economic—will in great part determine whether and how the visual images influence behavior, whether anything like a universal, uniform impact occurs, or whether in certain situations traditional forms and values may not survive, is certainly worth considering. In a future issue, *Daedalus* proposes to do so, inquiring essentially into how we measure the impact of "the moving image," as film and television infiltrate virtually all societies. Is it possible that the power of the new media has been greatly exaggerated, that all our estimates of its influence draw on the experience of only a few cultures? If the assault on "traditional" culture has not been as pervasive as some have suggested, and if "tradition" is itself now making use of the visual media in self defense, then the influence is indeed substantial, though not of the kind normally considered. We need to know more about the principal architects of the symbols and values communicated by the visual media, and how these reflect the political, economic, and cultural interests of particular groups. If there is something that can be correctly called an English-speaking "cultural imperialism" today, and if it draws heavily on the images disseminated by the two

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

principal English-speaking nations, the question of why the United States and the United Kingdom have come to enjoy such influence ought to concern us. So, also, we ought to be interested in exploring how those who have remained free of this influence have managed to do so, whether they are subject to the influence of other moving images, and where these are produced. Our purpose, in short, is to explore the cultural trade routes of the contemporary world, to see how visual products circulate.

In our issue on "Reading: Old and New" (Winter 1983) *Daedalus* dealt with a great variety of themes, not the least important being the new scholarship on the "reader and the reading process." There are today wholly new ways of looking at both, and questions are being raised about "readers" and "texts" that would have been quite inconceivable a generation ago. It is in this tradition that Janice Radway writes, for her concern—an ethnographic one—is to learn more about why certain people read certain books, how "communities of readers" are formed, why such communities are important, how books answer specific needs and how those needs may be interpreted. Radway takes for granted that reading behavior will vary according to time and place, but also that there is much to be learned from a study of both.

Looking closely at a group of American married middle-class women, all avid readers of romance fiction, Radway seeks to explain what their habit tells us about the women and the society they live in. If, for example, romance reading ought to be interpreted as a sort of "declaration of independence" by the women, what sorts of independence are they in fact seeking? Is it, as Radway suggests, the creation of "space" and "time" that will be uniquely their own, that others, including other family members, will not be allowed to intrude upon? Still, if such reading is thought of simply as an escape, then, according to Radway, its other chief function is wholly ignored: these romances, we are told, are read because they are instructive. Women read these books to learn from them. What, then, do they learn? What intellectual (and emotional) needs are satisfied by such reading? Radway's analysis leads us to the most fundamental question of all—what can such reading tell us about American women—not insignificant in numbers, who take delight in such fiction? What does it tell us about the variety of needs and tastes endemic to American society today? Does such ethnographic research

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

contribute to the exploration of a society substantially less homogeneous than is sometimes believed?

More than two decades ago—long before the subject became a daily concern of the mass media—*Daedalus* published a special issue on "The Woman in America" (Spring 1964). While the subject has figured frequently in other *Daedalus* issues since, we have never specifically returned for a reprise on the 1964 study, though the suggestion that we do so has sometimes been made. To bring the subject up to date, to indicate how scholarly and popular interests have shifted, and what the consequences of all this have been, would certainly prove challenging. There have been suggestions also that we consider doing an issue on human sexuality, dwelling on all that has changed in the public's perception of it in recent years, and how this has influenced research and scholarship. In the last months, however, the more insistent call has been for a *Daedalus* issue on love. The prospect of such an issue is made very much more real for us by the kinds of questions raised by Carol Gilligan's provocative and original "Reflections on the Psychology of Love."

While the Gilligan essay in one sense may be read as an analysis of the limits of Freud's understanding of women—of both their sexuality and their relationships—its larger purpose is to raise more fundamental questions about the utility of most conventional notions of morality, of many of the traditional distinctions made between egoism and altruism, between rationality and emotion. Through a study of love, and of how the subject both eluded and mystified Freud, Gilligan is able to contribute her own insights into what is learned when the lives of women are closely studied, when it is recognized that love for women is generally defined in terms of relationships—connections with others—and that the imagery and representations of this love can never depend on the idea of conquest. If love is a subject that waits to be studied historically, if greater attention can be given to the kinds of questions raised in this essay, the potential for a *Daedalus* issue is greatly enhanced. The inquiry that *Daedalus* opened with its issue on "Adulthood" (Spring 1976) needs to be pursued.

Rhetoric, once an essential component of all classical education, is returning today as a major concern for scholars in a great variety of disciplines. Donald McCloskey's study of the rhetoric of economics, only one contribution in a large collection of essays inspired by

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

an interdisciplinary group of scholars at the University of Iowa, seeks to draw attention to the possibilities of the subject if looked at in new ways. This essay, like several of the others, examines closely the rhetoric of what for too long has been thought to be wholly objective sciences, raises questions about value-free inquiry more generally. A concentration on rhetoric provides a wholly new perspective on putative objectivity—"disciplined inquiry"—in scholarship. For McCloskey it raises the possibility that "science itself is a collection of literary forms," and that "literary forms are scientific." It would be useful for the editors to learn whether this is the kind of subject that readers would have us explore more fully in a *Daedalus* issue, whether it does help to explain why controversy and difference are at the heart of all intellectual inquiry, and why "fact" remains one of the more elusive of all intellectual constructs. The dimensions of the subject—its controversial character—may be suggested by McCloskey's remark that economists "think and persuade with metaphors, authority, and considerations of symmetry, beauty, and moral weight, just as humanists of all sorts think and persuade with numbers, experiments, and considerations of economy, power, and predictive force." The idea that the social sciences appeal to scientific method and the humanities look for wholly other forms of validation is shown to be a vast oversimplification.

Many questions are raised, at least implicitly, by Alan Brinkley's analysis of the way historians have written about the twentieth century and more specifically about America's development in this century. Why, he asks, has so much of this writing been anecdotal, preoccupied with personalities and politics, so totally lacking in those large and bold interpretative questions—social, cultural, and economic—that have preoccupied historians concerned with other periods and places? Why so meager an intellectual diet? Why such great and continuing professional restraint? Brinkley's analysis compels the posing of a question sometimes asked by *Daedalus* readers in the past. Has the time not come for a new generation of American historians to attempt wholly revisionist histories of the Franklin Roosevelt era and of the 1920s, '30s, '40s, and '50s more generally? Is it not essential that such history start by posing other kinds of questions than the ones heretofore asked? Will it not require also the construction of wholly new kinds of archives that will depend less on official documents lodged in Presidential libraries and more on

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

every other kind of document and artifact, which are available in such abundance?

Brinkley reminds us of the problems created for the contemporary historian by the mountains of data that exist, that make all twentieth-century analysis so difficult. Why, then, add to the problem? Because it may help the historian do what he is uniquely qualified to do—to see the past in perspective, to avoid the more conventional cliches, including the one that holds that we live in the most complex of times, that only superhuman energy and understanding can make sense of our chaotic age. The "sentimentality" of too much contemporary history, together with its opposite, a too-brittle "hardness," ought to be guarded against. Other possibilities exist. The professional historian concerned with the events of this century in the United States might do well to "go to school" in the works of his colleagues who deal with other periods and even other civilizations.

In asking "What is the South," Richard Marius is doing considerably more than raising questions about an "exceptional region," different from all others within the continental United States. He is inquiring into the reality of regional distinctiveness today, asking where and why it survives, and what its consequences may be. The same kinds of questions could be asked about the American West, New England, or any number of other such self-defining American regions. Are they principally expressions of a continued nostalgia for a past now largely lost, or do they seek to discover real entities, significantly different in their configurations of power and influence, in their cultural traits from what exists elsewhere? What, in short, is the New England equivalent for Southern religion, particularly fundamentalism? Indeed, are these separate worlds as different in certain important cultural, intellectual, and social respects as the province of Quebec is from neighboring Vermont, and as any state in Mexico is from America's New Mexico? If Marius has seen the situation of young blacks in the South accurately—if his interpretation of their words and beliefs is correct—this regional "difference" could have significance for the country. Why, then, do we not hear more about such regional differences, not only about the problems they create, but also about the opportunities they offer? Ought not twentieth-century American regionalism be looked at more critically?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Victor Weisskopf, in asking what science is, how it has come to have its present attributes, and how it is now developing, is as much concerned to define the limits of scientific inquiry as to celebrate its intellectual and technological triumphs. Indeed, his essay, together with that of Robert Root-Bernstein, are intended to draw a sort of ecological map of all intellectual inquiry, suggesting what domains may be legitimately appropriated by science or left to science, and what must be reserved to others. There is no "self-denial" in this division of labor. Weisskopf clearly believes that it is the condition—the necessary condition—of scientific progress and indeed of all creativity. The sciences and the arts are distinct, but neither is independent of the other, which is not to say that one is significantly more important than the other or "causes" the other. Wiesskopf knows that "there are many modes of thinking and feeling," and that each "contains some particle of what we may consider the truth." Science and technology, by themselves, cannot possibly describe or comprehend the whole of reality. Humanity's predicament makes mandatory a much wider tolerance, a much more exhaustive search.

The connections between the sciences and the arts need to be studied both in their historical dimensions and in their contemporary settings. Root-Bernstein is aware that such inquiry is very uncommon. Indeed, even in studies of creativity, there are few incentives for linking the "two cultures," for seeing them as complementary. We know all too little about the creative process; there are some who say that there is very little that can be known. Root-Bernstein calls this a "fatal form of reasoning." He goes on to say: "What is distressing is not that there are so many pedants, scholastics, and journeymen in every culture, but that their prevalence and virtual ignorance of the cross-cultural bases of creativity are sometimes an insurmountable impediment to that tiny number of innovators and intellectual hybrids who spawn the vast majority of new ideas." Would a *Daedalus* issue that examined that proposition, together with others made by Weisskopf, be an appropriate and useful way to open up a consideration of the connections between the arts and the sciences.

In past issues of *Daedalus*, consideration has been given to another sort of cooperation, more finite and perhaps more ephemeral, but clearly important to those who understand what the stakes are in a world where nuclear destruction is a distinct possibility. If many issues have been given over to studies of arms control, defense

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

policy, and the like—and such studies are also planned for the future—America's relations with its allies, particularly in Western Europe, have always figured prominently. Some, refusing to be alarmed, say that those relations are perpetually in a state of crisis. Why, then, become overly agitated by the most recent sounding of the tocsin? It is Stanley Hoffmann's view that the present "misunderstandings" do indeed contain certain novel elements, that they may, this time, also call for certain new policies. If he is correct that the combination of Europe's "parochialism and impotence," together with America's "parochialism and arrogance" have significantly increased the suspicion and bad feeling on both sides of the Atlantic, it is his more arresting observation that only the Soviet Union's stolidity—its "flat-footedness" in short—has saved the day so far for the United States. Conditions would be substantially more serious for the West if the Soviets were to show greater flexibility in their foreign policy. What, however, would follow if the United States showed greater flexibility? Who has the wit to compass this, to know how to articulate new purposes, and to translate these into public policy? Hoffmann mourns the consequences of intellectual sclerosis, the universal malady of our day. What is the future of institutions that appear so paralyzed and so impotent? Is the situation as grave as Hoffmann suggests? Is the day for new "grand designs" really over? Will none of them really work? What about the so-called placebos mentioned by Hoffmann? Are any of them likely to make a difference? Or, is Hoffmann's own solution—"a loosening of ties, in order to preserve the indispensable—the alliance for the defense of Western Europe," the only viable remedy? What would such a policy mean, not only for Europe, but also for the United States? Can such a relaxation of an older connection, which has weathered so many other crises in recent decades, be successfully managed? Is this the sort of theme that ought to figure in a future issue of *Daedalus?* How ought it to be formulated?

This issue of *Daedalus* owes a great deal to foundations that have helped us with several earlier issues. We hope it may elicit support from still others for the kinds of studies that need to be launched. Thanks are due to the John and Mary R. Markle Foundation, to the National Science Foundation, and to the Lyndhurst Foundation.

S.R.G.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

J. David Bolter

Artificial Intelligence

ARTIFICIAL INTELLIGENCE, writes Marvin Minsky, is "the science of making machines do things that would require intelligence if done by men."[1] Twenty years ago, Minsky and his colleagues were misfits in the world of computing. While others applied computing techniques to engineering and business, artificial intelligence specialists spoke of replacing the human mind, a "meat machine," with their more efficient electronic models, of creating nothing less than a new species for the planet. Today, work in artificial intelligence is more respectable, though still controversial. As our society has come to depend upon computers, it has grown less skeptical of the limitations of the machine. If twenty years ago there were only a few professors tinkering with programs to "rediscover" the Pythagorean theorem and to play poor chess, today they and their followers have established research centers in universities both here and abroad and are beginning to found companies.

That such work has indeed achieved legitimacy can be seen in the handsome support offered by the Department of Defense and the other customary sources of scientific funding. Even the pragmatic Japanese are turning to artificial intelligence as part of their assault on this country's hegemony in computer technology. All are lured by the promise that artificially intelligent computers will produce large profits and powerful new weapons. Robots will replace human workers at more complicated tasks than the assembly lines of today; smart bombs will find their targets with greater accuracy; programs will answer questions and obey commands given directly by corporate executives and military officers. In general, more of the op-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

erational planning so popular with business and the military will be performed entirely by computer.[2]

For years we have been reading in newspapers and popular magazines about the wonders of computers, and for decades, science fiction movies and books have featured all-knowing, though often malevolent, computers and robots. Many laymen believe that artificial intelligence is already with us, that some computers can understand the spoken word, read the newspaper, pilot a car using a television camera, or design their own even more talented offspring. In fact, no current program can do more than parody these achievements. Artificial intelligence is much harder to come by than the real thing: excellent programmers have been working for years on such problems and have made only a little progress. There is an enormous gap between what computers were built to do (mathematics and symbolic logic) and the wide range of skills that humans possess. Programmers must still work close to their machine's natural talents.

Computers are good at such well-defined and logical games as checkers, backgammon, and chess. They can play the first two about as well as any human, and can defeat any amateur at chess. For artificial intelligence programmers, however, playing chess and solving logical puzzles are still too mechanical and specialized. They want their machines to do something indisputably human, so they aim to endow their computers with the human facility for language; they write programs to read stories and news reports, "remember" the facts, and then answer questions about the reading. Or they tackle the problems of mechanical vision by devising a program to identify geometrical figures in a scene generated by a television camera. Automatic techniques for drawing inferences are used in their so-called expert systems, programs that depend upon hundreds or thousands of predefined rules-of-thumb: in a field of medicine, to diagnose patients; in geology, to suggest whether the particular rock formation is likely to contain oil; in chemistry, to identify organic compounds. Expert systems now operate in that socially uncomfortable limbo where the business world and the university meet. Meanwhile, business is making full use of robots, and the designers of commercial robots are drawing upon the research done by artificial intelligence specialists over the past twenty years. If anything, such robots have become too practical to merit the interest of many artificial intelligence specialists.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There are indeed practical applications for the techniques of artificial intelligence, but these applications are the less interesting half of the story. Despite its recent successes, artificial intelligence is still years, perhaps decades away from fulfilling its economic and military promise. Only scientific and industrial robots and highly specialized expert systems will have an important impact in the immediate future. For the rest, a breakthrough in computer chess will throw only a very small number of masters and grand masters into unemployment lines, and a coming glut of doctors in America may well save us from the need to install computers to diagnose our illnesses. Computers that can respond to simple English commands exist now and will certainly be improved. Looking beyond today's word processors, we shall soon regard computers as a full-fledged medium of verbal and visual communication. But it will be a long time before we can feed our home computers a copy of the *New York Times* and expect a reliable summary of the news.

Artificial intelligence is both compelling and controversial, not for its practical achievements, but rather for the metaphor that lies behind the programs: the idea that human beings should be seen as nature's digital computers. Ever since the prototypes were built in the late 1940s, computers have been invading domains that had previously belonged only to humans. They have solved differential equations for engineers and applied mathematicians. They have taken over such clerical activities as billing, inventory, and the printing of reports for the business world. They have taken control of machines in industrial processes. Before the advent of computers, these were tasks that required human intervention. Such mechanical devices as typewriters and adding machines could help, but men and women had to work in close association with these machines. The whole trend of the industrial revolution has been to make machines more self-sufficient, to move human controllers farther away from the process controlled. The trend began with the steam engine, if not centuries earlier with windmills, waterwheels, and the mechanical clock, and it continued with the power loom, the steamboat, the railroad, the dynamo, and the assembly line. The computer is the latest stage in the autonomy of the machine.[3] A programmer simply loads his code into the computer and sets it going. The machine may then act upon its instructions for minutes or hours, without further attention, and produce the most varied results in apparent independ-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ence of the programmer. One program may fly the space shuttle from orbit to landing with no help from the pilot; another may type out a letter in perfect paragraphs with underlining and boldface for emphasis. A program can even surprise its creator, often by committing some disastrous error. This ability to dispense with human control while performing complex tasks makes the computer metaphor almost irresistible to millions of professional and casual programmers. Is there not something human about this machine? Or is the reverse true? Is human nature itself mechanical, if capacities that seem characteristically human can be given to a machine?

This ambivalence has given rise to the project of artificial intelligence, whose goal is to achieve the complete assimilation of man and machine. If computers can already do mathematics, play games, and control other machines, artificial intelligence aims to endow them with every other function of mind and sense. Opponents of artificial intelligence, such as Herbert Dreyfus and Joseph Weizenbaum, find the computer metaphor absurd or dangerous, or both.[4] Proponents, including Nobel laureate Herbert Simon, enjoy the controversy, and have fanned the flames with extravagant claims of what their programs would be able to do in a few years. The decades have come and gone, and many of the claims have yet to be realized.

The most famous claim was made by Alan Turing.[5] A great logician, Turing was fascinated by the computer metaphor, and in 1950 predicted that by the end of the century, a computer would be able to deceive us with its electronic imitation of human faculties. He proposed the following test. Put someone at a computer terminal in one room and connect the terminal by wires to a second room. The person does not know who or what is in that second room: it may be another human seated at another terminal, or it may be a digital computer. To find out, he types questions into the terminal and receives answers from the second room. The interrogator is free to ask anything he likes. He can, for example, pose math problems, ask about English literature, or start an argument about politics. He has five minutes to decide whether there is a human at the other end of the wires or a machine. Turing predicted that by the year 2000, the computer would often succeed in fooling its interrogator. Now there is no computer or program at present that could participate meaningfully in the Turing test, and with only sixteen years left before the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

turn of the century, the prediction will probably fail. The terms of the test, however, are still quoted with approval by those working on artificial intelligence, and they remain faithful to their goal of proving that a computing machine can successfully imitate its creator.

In this respect, the artificial intelligence project is part of a long tradition.[6] For centuries, engineers and craftsmen have been making machines that imitate human beings, although their efforts have never been taken as seriously as the current project. The immediate forerunners of intelligent computer programs were electromechanical devices. In the fifties, for example, Grey Walter, a physiologist, designed an electromechanical "turtle" that could negotiate its way around obstacles on the floor. The turtle's technological ancestors include an electromechanical chessplayer built by the Spanish technologist Torres Quevedo. Before that, there were generations of fully mechanical automata. The most famous in the eighteenth century were those of Jacquet-Droz, including a boy who could write a message with pen and ink and a girl whose moving fingers could play a tune on a harpsichord, and a duck by Vaucanson that could quack and even eat and eliminate its food. The gardens of Europe in the seventeenth and eighteenth centuries were also adorned with figures powered by falling water: Neptune and Orpheus, and nymphs and shepherds from the pastoral tradition.[7] Moving figures, in fact, both human and animal, were represented on mechanical clocks as early as the thirteenth century, when these machines were invented in Europe.

Like the programs of artificial intelligence, all these hydraulic, mechanical, or electromechanical devices were attempts to imitate some aspect of human or animal nature. The artificial intelligence programmer would say that the earlier attempts were trivial because they were limited to external human features and rigid actions. That the writing boy of Jacquet-Droz looked human would be of no importance, since the boy could only repeat one or a few messages at a time and the messages had to be expressed as a complex interaction of gears. The effort was a tour de force, not a significant achievement of science or engineering. Gears were simply the wrong technology for expressing the fundamental qualities of human nature, such as problem-solving and the use of language. Even electro-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

mechanical devices could only point the way to the fully electronic technology that can express human nature.

There is some justice to this claim, because the computer *is* a more flexible machine than a clock or an electromechanical switchboard. Each technology, however, has had its own peculiar power as a metaphor. The idea of comparing the bodies of humans and animals to clockwork mechanisms was compelling to philosophers as important as Descartes and Leibniz. What both argued philosophically was illustrated mechanically by automata like those of Jacquet-Droz and Vaucanson. Artificial intelligence specialists play a similar role today. The toymakers were expressing the excitement of the precise mechanical technology of the day, an excitement that was finding a more practical expression in the machines of the industrial revolution. In the same way, artificial intelligence programs are illustrations of the possibilities of our new electronic technology.

ARTIFICIAL INTELLIGENCE AS A SCIENCE

Not surprisingly, artificial intelligence specialists do not see themselves as modern colleagues of the toymakers who amused the royalty of Europe in earlier centuries. Certainly, their work with computers requires a kind of training and intellectual rigor that toymaking did not. Our society is far more dependent upon science and technology today than at the dawn of the industrial revolution, and we accord technologists a higher status. Because their work has been questioned even by some other computer specialists, programmers in artificial intelligence are particularly concerned about status. They are toymakers who work with the expensive, powerful, and prestigious toys we call computers, and they want the appropriate recognition. In their writings, they try to present their field as a fledgling science: the science of cognition or the study of "thinking systems." They claim that only artificial intelligence can provide a precise and testable model for theories of memory, learning, language, and human inference. A good program, they say, is not merely a metaphor, an implied comparison between man and machine. Rather it is so much like a man or woman in important ways, that by studying its performance, we can learn about human thought or indeed about cognitive processes in general, of which computers and humans are both examples.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Load an artificial intelligence program into a computer and set it running. Of what is the computer now a model? The term "electronic brain" was once a common expression of the computer metaphor, but is the computer a model of the human brain? This was proposed in the early days of computing. Turing and another pioneer, John von Neumann, had thought of comparing the brain's "hardware" with the computer's. As early as the 1940s, Warren McCullough and Walter Pitts had described the mathematical properties of a net of neurons, drawing an analogy between electronic components and the human nerve cell. At the time, neurons still seemed to be fairly simple processors of electric information, and a digital computer might hope to reproduce the network of neurons in the brain. But the hope was never fulfilled. Although some elegant mathematics was discovered along the way, the elementary brain machines themselves were never more than toys. Scientists also began to realize that the brain, with its forests of dendritic connections and complex chemistry, was not a simple network of discrete logical components. In spite of the tantalizing fact that both computers and brains work their magic with electrical signals, the digital computer is not an adequate model of the human brain itself. Since the mid-1950s, most artificial intelligence specialists have shifted their efforts from physiology to psychology: their computer programs are now meant to be models of some facet of the human mind (memory, linguistic ability, inference) rather than the brain itself.

The artificial intelligence project has in fact borrowed the notion of a scientific model from other, more established sciences. However, computer models do not have the same status as those of physics and chemistry. The physicist's model is a series of mathematical equations and expressions, not tangible entities or metaphors. Often, scientists will devise metaphors to help them discuss the significance of the equations or to make their results more accessible to the layman. So, for example, electric current in a wire is compared to the flow of water through a pipe; the atom is said to be a miniature solar system, with electrons orbiting the nucleus like planets; Einstein's four-dimensional universe is sometimes compared to the surface of a three-dimensional globe. But for the physicist, the model is the mathematics and its interpretation; the comparison to some familiar physical object is of secondary importance. The wonder is that these highly abstract mathematical models should work in the world of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

experience, allowing scientists to predict and control events—that, as Galileo said, the book of nature should be written in the language of mathematics. The mystery of the mathematical prediction and control of nature remains a subject for philosophers of science. My point here is simply that the computer models of artificial intelligence are not like the mathematical models of physics. Computer models are not analytic in the same sense; they do not rely on deep mathematics, and they have no vitality and carry no intellectual conviction when separated from their machine.

Consider how the physicist and the artificial intelligence programmer each use the computer in their work. For the physicist, the equations and their interpretations form an abstract world that he can explore and modify with no more equipment than a pencil and paper. Often he may prefer to transform the equations into a computer program and see how the model performs with various assumptions and inputs. The artificial intelligence specialist may also begin his work in isolation from his machine. He may devise, with pencil and paper, an algorithm (a step-by-step procedure) to show how the mind stores, transforms, and retrieves units of information. He then translates this algorithm into a program, tests it on the computer, and adds refinements, always seeking to make the computer more faithful to his notion of how the mind works. But there is this crucial difference between the artificial intelligence specialist and the physicist: the former began his theorizing with the computer in mind. It may happen that a physicist cannot fit his theory into the computer if his equations are too complicated or of the wrong sort for direct computerization. This cannot happen to the artificial intelligence specialist, since, by definition, his model must be computable. In artificial intelligence nothing counts as an explanation of the human mind unless it is a step-by-step procedure operating on digitalized information. In other words, for the physicist, a computer may help to explore the model; for the artificial intelligence programmer, the computer (running the particular program) *is* the model. And nothing is duller than reading a prose description of a program for artificial intelligence. The program only comes to life in the machine, and then it is fascinating to watch—as fascinating for its mistakes, its confusions, and infelicities of language as for its successes.

The artificial intelligence project therefore depends upon a technological metaphor rather than a scientific model. It is possible to in-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

voke the metaphor without a computer handy. In fact, psychologists today constantly speak metaphorically of visual "input" and linguistic "output," of the mind's strategy for "storing and retrieving" memories, of encoding and decoding messages. But behind these metaphors lies the machine itself. Much is made of our society's technological dependencies: on fertilizer, pesticides, and fossil fuels for agriculture, on railroads, automobiles, and airplanes for transportation, on titanium for national security. Here is a technology upon which a whole way of looking at the human mind now depends. Take away the computer, or (what is more likely) take away the excitement generated by this new technology, and the artificial intelligence project no longer convinces or threatens us.

SIMULATION AND REALITY

The artificially intelligent computer does not explain the human mind in the way that the physicist's equations explain the nature of atoms. Instead, it imitates the mind, and the point of imitation is to produce the same visible results without worrying about causes. Recall the definition of artificial intelligence as "the science of making machines do things that would require intelligence if done by men," a definition that stresses results over methods. The artificial intelligence programmer works by this pragmatic criterion: if a computer program acts like a human mind, then it deserves to be counted as one.

A philosopher with a concern for analyzing concepts and defining terms will not accept this pragmatism, and one such philosopher, J.R. Searle, has argued against the artificial intelligence project for just this reason.[8] Searle asks us to suppose that a programmer has in fact written a flawless program for understanding stories in Chinese. The program reads in the story in Chinese, accepts questions about its reading, and responds by printing sensible answers. All its input and output is in idiomatic Chinese. Like any program, this one works in a purely mechanical fashion, embodying the rules of Chinese chirography and grammar and applying those rules one at a time as it reads and responds. The program therefore reduces the ambiguity and complexity of the Chinese language to the purity of formal logic.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The artificial intelligence specialist would say that this program "understands" Chinese, for he accepts the definition that to know Chinese is to be able to transform input sentences into meaningful output. But Searle replies that the computer so programmed does not understand Chinese at all, and he proposes the following experiment by way of proof. Reverse the customary process of automation: replace the computer with a human being, one who speaks English and knows not a word of Chinese. Write out all the rules of the program in English, and let this human information processor apply these rules to sentences given him in Chinese. If necessary, have him memorize the whole procedure. Now this person can read stories and answer questions in Chinese, totally mechanically and by the way quite slowly, but he still cannot speak or write any Chinese on his own. He simply looks at patterns of lines on paper, consults his rules, and makes new patterns in reply. We would never say, Searle argues, that such an idiot savant understands Chinese, for such understanding is possessed by a human being as a part of his mental life, not as an externally imposed and memorized procedure.

Searle's human computer is a touching, rather Kafkaesque figure, who sits at his desk shuffling pieces of paper and recopying meaningless symbols according to methods he has learned by rote. Yet he has not convinced artificial intelligence programmers to abandon their work. They continue to believe that understanding Chinese can be explained by the formal logic of their machines. The dispute illustrates the utterly opposed points of view of the traditional philosopher and the programmer. For Searle is right by the standards of analytic philosophy. The program he imagines merely simulates a man answering questions in Chinese; it does not penetrate behind the visible effects to arrive at a theory of mental acts or intentionality. Searle skillfully reduces his argument to a point of common sense, when he writes with a note of exasperation:

> No one supposes that computer simulations of a five-alarm fire will burn the neighborhood down or that a computer simulation of a rainstorm will leave us all drenched. Why on earth would anyone suppose that a computer simulation of understanding actually understood anything? It is sometimes said that it would be frightfully hard to get computers to feel pain or fall in love, but love and pain are neither harder nor easier than cognition or anything else. For simulation, all you need is the right input and output and a program in the middle that transforms the former into the latter. That

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is all the computer has for anything it does. To confuse simulation with duplication is the same mistake, whether it is pain, love, cognition, fires or rainstorms.[9]

Here, the artificial intelligence project has indeed abandoned common sense. In its excitement over the computer metaphor, it must abandon common sense, and indeed all computer programmers are tempted to do the same. Every one is inclined to confuse simulation with duplication because of the protean nature of the computer itself. This abstract machine can imitate the design, if not the physical effect, of any other machine and of many aspects of the natural world as well. The computer can simulate the operation of a jet engine, the traffic flow of a city, the reproductive rates of a colony of bacteria, or the invasion of Western Europe by Soviet tanks. Any phenomenon that can be divided into a series of discrete events can be simulated with some success by the computer. Every significant program is a simulation, an attempt to recreate within the computer some aspect of the world outside. Moreover, simulation encourages a particular view of the problem at hand, not the view of the mathematician who wants an exact and provable solution nor the view of the traditional philosopher. Instead, simulation is a matter of educated trial and error, of balancing one option against another, of minimizing evils and maximizing benefits. The programmer sets up his conditions and then tries out a series of possible futures: What happens to air quality in county X if we build a refinery in city Y? What happens to unemployment in city Y if we forgo the plant or if we build two plants? In reality, we cannot play with the future in this fashion, but in the world of the computer we can. We begin to regard the real world itself as simply one last run of the simulation.

The artificial intelligence project is an extension to the human mind of this intriguing aspect of the computer. On the one hand, the artificial intelligence programmer is quite practical: he simply wants a program that gives good Chinese answers to Chinese questions. On the other hand, he willfully ignores the difference between the "reality" of the world outside and the simulations inside his machine, between understanding Chinese and simulating that understanding. Computers are becoming better at manipulating elements within their tiny, simulated worlds, and more and more people are working with computers and coming to appreciate the style of work

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

promoted by simulation, by trial and error, by thinking in terms of the process and its results rather than the deep causes. It may be that artificial intelligence will win this philosophical debate simply by sweeping away its opponents, refusing to engage them on their own ground. It will then offer its own answer to the great philosophical question: What is knowledge? The answer—that knowledge is the manipulation of symbols according to formal rules—will be wholly unsatisfactory to analytic philosophers and indeed to many philosophers of the older schools. The whole question will have been recast in operational terms provided by the computer. But of course the question has been recast many times in the past: by Socrates and Plato, by the Christian theologians, by Descartes and the mechanists. Now the technologists of the computer age, along with their allies in other disciplines, may have their turn.

PHILOSOPHICAL ENGINEERING

Artificial intelligence, then, is an exercise in symbolic logic, but it does not depend upon the relationship between mathematics and experiment that characterizes the physical sciences. Artificial intelligence has important links to modern philosophy and linguistics, but it is not philosophy in the sense of a careful analysis of the language we use to frame concepts. It is instead an intriguing combination of logic, technology, and philosophy—a combination that might be called "philosophical engineering." The oxymoron is intended. Engineers are eminently practical people, but the computer, the great achievement of electrical engineering, is also the most philosophical of machines. The computer turns engineers designing computing chips into philosophers of time, as they muse over the tiny fractions of seconds required for signals to thread their way along the chip. It turns programmers into logicians, as they try to decompose a mathematical or business problem into a step-by-step programmed solution. The ambiguity of the computer itself, a network of wires and transistors that somehow embodies theorems of logic, creates the ambiguous figure of the philosophical engineer. And workers in artificial intelligence are the most philosophical and ambiguous of all. Some may consider it a debasement to hand philosophy over to computer programmers; others seem to think the computer will revive philosophical debate. In either case, the development is significant.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The real homunculi created by the computer are not the chess programs and story understanders, but rather the computer architects, programmers, knowledge engineers, and artificial intelligence specialists themselves.

Man's view of his own nature has alway been conditioned in part by his contemporary technology. The best historical example is the effect of the clock and clockwork mechanisms on the mechanistic philosophies in the seventeenth and eighteenth centuries; but there are other instances from Greek times to the modern day in Europe, and no doubt in other cultures as well. In the past it was the philosophers who borrowed metaphors from technology: Plato and Aristotle from the Greek craftsman, or Descartes and Leibniz from the clockmakers. Today, thanks to their remarkable machines, the technologists have invaded the domain of the philosopher. The computer specialist dares to suggest that he can decide questions of epistemology, semantics, and psychology. The practice of "thinking through technology," as old as technology itself, has never yet become the dominant way of thinking in our culture. Yet this is precisely what the programmer in artificial intelligence is proposing: that we stop thinking of the computer as one modern machine among many and begin to see it as the true technological reflection of our own human nature.

MAPPING THE MIND

For my part, the most striking feature of the computerized view of man is this: that it reduces the mystery of human thought to a network for formal symbols. The computer reduces all problems to patterns of such symbols, often with great success. But the irony here is that formal logic, a product or at least a discovery of the human mind, is now being used by artificial intelligence specialists to explain the human mind itself.

In the computer metaphor, thinking is a process, the systematic progress of a computer racing through its program. But yesterday's thoughts, memories, and sensations must have some static representation in the machine, for they are data upon which our mental computer operates. Now, electronic data is composed of "binary units" or "bits" of information, which are merely strings of ones and zeroes. How can memories and thoughts be represented in such

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

strings? The bits must be given a structure, a particular order and context that make them meaningful. Indeed, determining the appropriate data structure, deciding how the computer will interpret its ones and zeroes, is the programmer's main task. This is as true of the mathematician and the city planner as of the artificial intelligence specialist: they must all find suitable ways of arranging their data. However, the artificial intelligence programmer has the unusual task of finding data structures that will reflect the interplay of thoughts and sensations in the mind. He relies upon the computer's capacity to link together its discrete elements of data. In various ways, one string of bits in the machine can point to the location of another string, that string to other strings, and so on. The computer's memory can be organized like a road map, where the data elements are the towns and the pointers are the highways that lead from one town to the next. The trick for the artificial intelligence programmer seeking to imitate the mind is to choose the right combination of towns and highways, data elements and links among elements.

Here is an example. Suppose that our programmer wants to give his machine a knowledge of a common daily activity such as going shopping. He might start by sketching his structure on a sheet of paper. At the top of the sheet he draws a circle and writes "shopping" inside it. He then thinks of kinds of shopping: for food, for clothing, for an automobile, and the like. Each kind gets its own circle, and each circle is connected by a line back to the original circle. He proceeds to subdivide each kind. To shop for food, one may drive to the grocery store, get a basket, load it with vegetables, and so on. The circles begin to multiply, and the lines connecting them begin to crisscross. One may drive a car to the clothing store and to the drugstore as well as the supermarket, so that several lines converge here. The process of dividing actions into smaller subactions continues: to drive the car to the store, one starts the car, pulls out of the driveway, turns onto the main street, and so on. Suppose the programmer also wants to include the experiences that one particular person has had while shopping. These memories can be represented by more circles joined to appropriate places in the growing network. Now the programmer's paper has become a road map of the act of going shopping, in which the circles are activities or memories, and the intersecting lines are the associative or logical connections between

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

these activities and memories. So far the structure exists only on paper. The next step, by no means trivial, is to replicate that structure inside the computer. Of course, the working programs of artificial intelligence are much more sophisticated about organizing their road maps than I have been. But they all rely on the principle of circles and lines, data elements and pointers, for there seems to be no other method by which a digital computer can process such information.

What is "inside" each circle? There is nothing more than a label, perhaps bits representing the word "shopping" or "auto" or "vegetable." Each circle is a formal symbol having no meaning in itself. In this computerized road map, meaning resides entirely in the interconnections between these symbols. And the meaning is realized only in operation, by programs that wander through the network of symbols—for example, a program that answers questions about what one may or may not buy in a grocery store. The thinking programs of artificial intelligence simply follow the links from one symbol to others, examining, modifying, and extending the network. I say "simply," but the programs are often ingenious, indeed triumphs of craftsmanship. They range from the coolly logical expert systems (the ones that diagnose patients) to programs that simulate the political views of a conservative voter. Artificial intelligence specialists may disagree violently over the appropriate structure, the choice of symbols, and the programming strategy. Some prefer a rigid hierarchy; others, a more diffuse pattern. Some prefer to crawl through networks of great complexity; others put more complexity in their programs and less in their data structures.

Nonetheless, in every program of artificial intelligence, the mind is a graph, and anything hidden or unverbalized simply slips through the interstices of that graph. Emotions and feelings can be part of the network as easily as logical decisions, but these, too, must have explicit links to other elements in the graph. Now, this is a revolutionary way of regarding the human mind. The computer and artificial intelligence are of course not solely responsible for the revolution: structuralism in linguistics and anthropology, behavioral psychology, and symbolic logic have played their part. The computer provides a technological focus for many lines of thought in the twentieth century, and the result is a psychology that cannot be dismissed lightly.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Consider for a moment the differences between the psychology of artificial intelligence and psychoanalysis, perhaps the most influential psychology of the last hundred years. Psychoanalysis is analysis in the old style: its seeks to probe beneath the surface, to find deep causes behind human actions. Its metaphor of the mind emphasizes the notion of depth, with the dark, instinctual portion of the mind, the id, buried below the more rational layers of ego and superego. The goal of psychoanalysis is to expose the repressed memories of childhood, and the psychoanalyst explains the human mind not as a processor of information but rather as a deep source of instinctual power and a shifting battlefield between passion and reason. There is a strong suggestion in Freud's writing that psychoanalysis is an unending process because the instincts, the id, can never be completely brought to light and rationalized.

There is an enormous contrast between this titanic, often pessimistic view of man and the view of the artificial intelligence specialist. A network of symbols in a computer program does not bring deep human motives to light, for there are no such depths. They disappear the moment we begin thinking of a human being as an information processor, a shuffler of symbols. The game of shuffling symbols may be tricky and indeed exasperating for the programmer, but the problems faced are wholly different from those of a psychiatrist, and not only because the psychiatrist is working with mental illness, with unusual or abnormal minds. In fact, artificial intelligence programmers sometimes try to simulate schizophrenia or paranoia, which they regard as special, perhaps pathological versions of information processing. Here, too, as in our shopping example, the flat, unambiguous network of symbols and the operational definition of success are their replacement for depth and causality in the representation of the human mind. Artificial intelligence specialists may even speak disparagingly of the idea of depth. Marvin Minsky has written: "To me 'intelligence' seems to denote little more than the complex of performances which we happen to respect, but do not understand. So it is, usually, with the question of 'depth' in mathematics. Once the proof of a theorem is really understood, its content seems to become trivial."[10] In fact, deep understanding in science or in psychology need not lessen the mystery at all. The more a physicist understands about subatomic particles, the stranger his world becomes, and the further he needs to look.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The more the Freudian psychologist probes the mind, the more he realizes the endless character of his task. But the specialist in artificial intelligence does have the experience Minsky describes: he does "reach bottom," almost immediately, as he maps complex human experiences into a data structure his programs can process.

* * *

The artificial intelligence specialists have, I think, gone too far. The computer is a mirror of human nature, just as any invention reflects to some extent the intellect and character of its inventor. But it is not a perfect mirror; it affects and perhaps distorts our gaze, magnifying certain human capacities (those most easily characterized as "information processing") and diminishing others. Nonetheless, the comparison of the human mind and the computer remains fascinating both for its distortions and its accuracies. We do not have to become religious converts to artificial intelligence in order to appreciate the computer metaphor. Nor do we have to join in the sterile debate over the question of whether computers can really think. Instead, we can ask in what ways the metaphor is apt and in what ways it may fail. Our view of the human mind changes from age to age, based upon social conventions, the work of poets and philosophers, and the current technical metaphors. Surely our contemporary task is to come to terms with the new electronic technology, a task that permits neither a complete rejection nor blind acceptance of the computer metaphor.

Predicting the future is so much a part of the project for artificial intelligence that I cannot close without making my own prediction. I think artificial intelligence will grow in importance as a way of looking at the human mind, regardless of the success of the programs themselves in imitating various aspects of human thought. It will color our view as long as computers themselves remain an important element in our technology. Eventually, however, the computer metaphor, like the computer itself, will simply be absorbed into our culture, and the artificial intelligence project will lose its messianic quality. We will have programs that perform various functions well and others less well—in natural language processing, expert systems, and in robotics. When, at some time in the future, the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

computer does lose its place as our leading technology, a new machine or technique will provide us with new metaphors, and the comparison of man and computer will become a topic in the history of science and philosophy. Essays on artificial intelligence (no doubt including this one) will then seem as quaint as *L'Homme-Machine* by the eighteenth-century philosophe La Mettrie, who created a scandal by arguing that human minds and bodies could be understood as clockwork mechanisms.

ENDNOTES

[1]*Semantic Information Processing,* edited by M. Minsky (Cambridge: MIT Press, 1968), p. v.

[2]A good example of the promises made by enthusiasts can be found in E.A. Feigenbaum and P. McCorduck, *The Fifth Generation: Artificial Intelligence and Japan's Computer Challenge to the World* (Reading, Mass.: Addison-Wesley, 1983).

[3]The immediate forerunners of the computer were electromechanical devices, including the ingenious code-breaking machines designed by Alan Turing and others during the Second World War. See A. Hodges, *Alan Turing: The Enigma* (New York: Simon and Schuster, 1983).

[4]See H. Dreyfus, *What Computers Can't Do: A Critique of Artificial Reason* (New York: Harper and Row, 1972) and J. Weizenbaum, *Computer Power and Human Reason* (San Francisco: W.H. Freeman, 1976).

[5]In an article entitled "Computing Machinery and Intelligence," originally published in *Mind* and reprinted in *Computers and Thought,* edited by E.A. Feigenbaum and J. Feldman (New York: McGraw-Hill, 1973), pp. 11–35.

[6]Artificial intelligence enthusiasts are themselves aware of this tradition. For a summary that concentrates on the twentieth century, see P. McCorduck, *Machines Who Think: A Personal Inquiry into the History and Prospects of Artificial Intelligence* (San Francisco: W.H. Freeman, 1979), pp. 3–90.

[7]For a description of some of these fascinating devices, see A. Chapuis and E. Droz, *Automata,* translated by Alec Reid (Neuchatel: Editions du Griffon, 1958).

[8]"Minds, Brains, and Programs," in *Mind Design: Philosophy, Psychology, Artificial Intelligence,* edited by J. Haugeland (Cambridge: MIT Press, 1981), pp. 282–306.

[9]Ibid., p. 302.

[10]"Steps toward Artificial Intelligence," *Proceedings of the IRE* 49 (1961): 27.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Joshua Meyrowitz

The Adultlike Child and the Childlike Adult: Socialization in an Electronic Age

IN THE FIRST HALF of the twentieth century, childhood was considered a time of innocence and isolation, a time for children to be sheltered from the nasty realities of adult life. Not only were they dressed differently from adults, but there were separate "languages" for each, since certain words and topics—birth, death, sex, and money—were considered unfit for children's ears. In addition, there was a strict age-grading system, supported by the structure of the school, that designated what a child of any given age should know and do.

The last thirty years have seen a remarkable change in the image and roles of children. Childhood as a protected and sheltered period of life has all but disappeared. Children today seem less "childlike." They speak more like adults, dress more like adults, and behave more like adults than they used to. We might call this trend the "end of childhood." But that would tell only half the story, for without a clear sense of childhood, there can be no distinct notion of adulthood. Indeed, there are indications that many of the adults who have come of age within the last twenty years continue to speak, dress, and act much like overgrown children. What seems to be happening in our culture is an overall merging of childhood and adulthood. In this essay I shall briefly summarize recent changes in the social roles of children and adults and then explore the possibility that the changes are related in part to our shift from a "book culture" to a "television culture."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE MERGING OF CHILDHOOD AND ADULTHOOD

One of the clearest signs of differences in status in a culture is a difference in appearance and dress. The inferior status conferred on children was once clearly discernible in the way they were dressed—whether in knickers, sailor suits, or cartoon character T-shirts. What was significant was not *what* children wore but the fact that their clothing was different from that of adults. Today, a walk on any city street or in any park suggests that the era of distinct clothing for different age-groups has passed. Children dress in three-piece suits or designer dresses, and many adults look like "big children" in their jeans, Mickey-Mouse or Superman T-shirts, and sneakers. In fact, many adults these days wear such "playclothes" to their places of work—including the White House. In addition, new "uni-age" styles of dress have emerged. Designer jeans, which are worn by young and old alike, represent a synthesis of the playclothes of children with the high-fashion clothing styles of adults. There appear to be no limits to this trend since there are now even designer jean diaper covers on the market.

This may all seem to be only a surface phenomenon—merely similar costumes overlaid on very different social beings. Yet children and adults have also begun to behave more like one another. Their posture, sitting positions, and gestures are becoming more similar, and the sight of adults sitting cross-legged on the ground in public or playing "children's games" is no longer an unusual one. Indeed, the latest generation of playthings—video and computer games—are played avidly by both adults and children alike.

Age-related vocabularies and forms of language are also merging, with many slang words, phrases, obscenities, and grammatical constructions being shared across a wide spectrum of age-groups. Children are speaking more like adults, and vice versa. Moreover, while children and adults may have always cursed in private, they now do so in front of one another. And the fact that, increasingly, children call adults—in many cases, their parents—by their first names is further linguistic evidence that the authority of adults in relation to children is disappearing.

It is no longer clear what topics should or should not be discussed with children. In any case, children now seem to know about once taboo topics before they are included in their home or school

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

education. Sex- and drug-education programs, for example, seem to be after the fact, since they have been outpaced by the runaway increase in teenage sexual activity and drug abuse. Birth control, abortion, alcoholism, and suicide are now "children's issues,"[1] and many young children today express fears of nuclear holocaust.[2]

For children, the issue of birth was once clouded in the myths of storks and cabbage patches. Today, many children are routinely told about birth and are included in what hospitals now call the "family birthing process." In some cases—though still rare—children are invited to be present at the delivery of their siblings.[3]

Things are changing for adults, too. Education, career choice, and developmental stages were once discussed primarily in relation to children, but increasing numbers of adults are enrolling in adult education programs, changing careers in mid-life, and becoming concerned with their "life stages."

That adult psychological temperament may also be changing is evident, for example, in the attitudes of the "me generation," which can be viewed as adult manifestations of the egocentrism traditionally associated with children. In addition, surveys indicate that the sense of responsibility that adults traditionally had for children is shrinking. Parents are less willing to make sacrifices for their children, and the numbers of parents whose thoughts about the future include concerns about their children's aspirations is in sharp decline. Americans now rank cars above children as aspects of a "good life."[4] One consequence of the loss of the traditional parental perspective is more democracy in the home. There appears to be a greater sense of equality between children and parents, and parents today are more likely to confide in their children and to admit to their own anxieties, shortcomings, and failures.[5]

This homogenization of status finds its reflection in changes in the images of adults and children in entertainment. The Shirley Temple character of the past was merely a cute and outspoken child; child stars today, however, such as Gary Coleman, often play the roles of adult characters who are imprisoned in children's bodies, as did Brooke Shields not too long ago. Similar adultlike children now appear in children's literature.[6]

In the age of the "antihero," it is also difficult to find traditional adults in films or on television. Adult characters—including many of those portrayed by Diane Keaton, Burt Reynolds, Chevy Chase, and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Elliot Gould—often have the needs and emotions of overgrown children. Not only are adults frequently outsmarted by children in today's television programs and motion pictures, but children are sometimes portrayed as more mature, sensitive, and intelligent (as in the motion picture *E.T.*).

The relative legal status of children and adults has also changed dramatically. In 1967, for example, the Supreme Court gave children the right to counsel, declaring that "neither the Fourteenth Amendment nor the Bill of Rights is for adults alone"; subsequent decisions have provided children with many adult legal rights.[7]

With the sharp increase in the number of minors who run away from home and refuse to return, courts are often faced with deciding between the rights of the children and the rights of the parents—and the balance of power is shifting toward the former. In more than twelve states, courts are now allowed to "emancipate" minors so that they can work and live apart from their parents. Connecticut, for example, allows sixteen-year-olds to "divorce" their parents and be treated legally as adults.[8] In California, freedom can be gained at age fourteen.[9]

The legal meaning of "child" has been further confused by the fact that children under the age of fifteen are increasingly committing "adult" crimes such as armed robbery, rape, and murder.[10] As a result, many states are moving away from special lenient treatment of juveniles. In 1978, for example, New York State passed a law that allows child-murderers over the age of thirteen to be tried as adults.[11] In 1979 the American Bar Association ratified a new set of standards for juvenile courts. Rather than being concerned with the child's "best interests"—the original rationale for the juvenile court system—the ABA suggested that children should be punished in proportion to the severity of their crimes.[12]

Conceptions of adult legal responsibility have also become clouded in recent years. The increasing use and discussion of the pleas of "*temporary* insanity" or "diminished capacity" as excuses for committing a crime in a moment of anger[13] suggest an attempt to legitimize temper tantrums for adults.

Even when the formal legal status of children and adults remains untouched, children have been accorded a new kind of respect from courts, medical institutions, and government agencies. Courts today are much more likely to consider a child's view in custody settle-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ments, and children and adolescents are now often asked for consent before receiving medical or psychological assistance.[14] The new attitudes are reflected in New York City's decision to name two foster children—aged thirteen and sixteen—as full-fledged members of a city panel to improve foster care.[15] Such moves represent a trend away from the traditionally paternalistic belief that adults always know what is in the best interests of a child.

In some circles, children have come to be seen as another disenfranchised "minority," and the Children's Rights Movement has developed to aid children in their struggle for freedom.[16] While some of the recent attention to children's rights focuses on the "right" not to starve or be beaten (children's *welfare*), other advocates of children's rights have pushed for the full social, economic, and political participation of children in society (children's *liberation*). As a member of the latter camp, Richard Farson has argued passionately for basic "birthrights" for children to counter what he sees as the segregation and disregard of children and the systematic discrimination against them by adults.[17] Similarly, in *Escape From Childhood,* educator John Holt outlines a "bill of rights" for children. He proposes that the "rights, privileges, duties, [and] responsibilities of adult citizens be made *available* to any young person, of whatever age, who wants to make use of them."[18] Holt's "rights" include the right to work, to travel, to vote, to have privacy, to own property, to sign contracts, to choose sexual partners, to have one's own home, and to choose one's guardians.

Such proposals for "full equality" for children and adults may be farfetched, but they reflect the current trend in child-adult relations. The "child-saving movement" of the nineteenth and and early twentieth centuries was a movement designed to meet the "special needs" of children and guarantee them the "right to childhood"—in a sense, to segregate them. The current trend is toward reintegration of the rights and roles of children and adults.[19] Certainly, all children and adults do not and cannot behave alike, but there are many more similarities in behavior and social status than there used to be. The traditional dividing lines are gone.

Whether these changes are good or bad is difficult to say. Whether children's "escape from childhood" should be viewed as liberation or aberration, or a little of both, is not clear. For better or worse,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

though, childhood and adulthood, as they were once defined, no longer exist.

THE MYTH OF AGE-DETERMINISM

One of the reasons the merging of childhood and adulthood has been difficult to observe—and once observed, still difficult to accept—is that there are so few intellectual models to account for it. One might expect to find a model in developmental psychology, but the dominant research and theory in this field has focused primarily on describing the capabilities of individuals at different ages or stages of development, with the greatest attention being paid to studying the factors that contribute to, or are associated with, age- or stage-related changes. Although a variety of differences *between* age groups have been identified, and the typical characteristics of people *within* given age groups have been described, what is usually taken for granted is the preexistence of distinct life stages such as "infancy," "childhood," "adolescence," "adulthood," and "old age." For the most part, the research in developmental psychology has not been geared toward studying factors that might change the social character of different periods of life.

The findings of developmental studies are usually reported in terms of developmental stages matched to age-ranges, and while a number of psychologists have explained the limited implications of findings stated in terms of ages,[20] their explanations are rarely included in popularized summaries of developmental research. Many parents, teachers, and others assume therefore that developmental research demonstrates that age itself naturally "determines" a child's behavior and the appropriate style of interaction between children and adults. The notion of "age-determined" behavior has been reinforced and extended by popular and scholarly publications on adult "life cycles," "seasons," and "passages." These works describe such periods as the "age-thirty transition" and the "age-forty crucible."[21]

In general, the idea of clear age-related "stages" of development appears to provide scientific support for our traditional distinctions in roles, rights, and responsibilities of people of different ages. Indeed, as interpreted by some, the developmental paradigm does not even allow for the view that dramatic changes in age-related roles

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

are possible.[22] Yet, those who insist on the "naturalness" of our traditional conceptions of childhood and adulthood are basing their belief on a very narrow cultural and historical perspective. Childhood and adulthood have been conceived of differently in different cultures, and child and adult roles have varied even within the same culture from one historical period to another.

To see and grasp the current changes in age-related roles, we need to distinguish between the biological existence of children and the social construction of "childhood," and to separate the maturational reality of adults and the social roles of "adulthood." We can observe physiological development, and we can test the cognitive capabilities of people of different ages in specific times and places. It is much more difficult, however, to discover the limits of individual differences in social development, the extent to which cultural factors override or blur "actual" differences, or the degree to which observable psychological differences among people of different ages necessarily determine particular social roles. In many ways, children may always be children and adults may always be adults, but conceptions of "childhood" and "adulthood" are infinitely variable.

We have learned a great deal in our search for universal developmental stages, but such investigations are incomplete. Obviously, any description of *constants* in human development tends to overlook the many factors that would bring about wide-scale *change* in the definition of child and adult roles. Even a complete understanding of universal features of development (and of reasons for individual variation) would not necessarily tell us why age-related roles vary from culture to culture and within the same culture over time. To discover the processes through which changes in conceptions of childhood and adulthood take place, we must look beyond the sequence of *individual* development and examine larger social variables that influence the behavior of *all* people, regardless of age or developmental stage. One such variable is the "social-information matrix."

SOCIALIZATION AS ACCESS TO INFORMATION

One of the constituent elements of social status is access to social information: people of the same social status usually have access to similar social situations and to similar social information; people of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

different social statuses usually have access to different social situations and to different social information.[23] Distinctions in status, therefore, are often supported by separating people into different social and informational worlds: managers keep customers out of restaurant kitchens; the officers' club is off limits to enlisted personnel in the armed services; and in schools, students are usually excluded from faculty meetings. Without the maintenance of such distinctions, differences in status would also begin to blur.

The movement from one social status to another—whether child to adult, medical student to doctor, or any role to any other role—generally involves gaining admittance to the locations associated with the new status and learning the "secrets" of those who play that role.

Human development and age-related social roles, therefore, are not only based on physiological and cognitive growth, but also on what might be called specific "patterns of access to social information." Every stage of socialization involves both exposure to, and restriction from, social information. For example, we tell sixth-graders things we keep hidden from fifth-graders and keep hidden from sixth-graders things we will tell them when they become seventh-graders. Socialization, therefore, can be thought of as a process of gradual, or staggered, exposure to social information. Children are slowly walked up the staircase of adult information, one step at a time. A child's individual cognitive development may help in the climb, but it is not the only factor. The amount of information available at each step will also greatly influence the child's relative social status.

This analysis suggests that if a society is able to divide what people of different ages know into many small steps, it will be able to establish many stages or levels of childhood. Conversely, if a society does not have sharp divisions in what people of different ages know, there will be fewer stages of childhood. If we always taught fifth-, sixth-, and seventh-graders in the same classroom, for example, we would have a very difficult time clearly dividing them into three different social statuses. The variations in social roles for people of different ages that characterize different historical periods, different cultures, and different subcultures may therefore be based in part on different patterns of "who knows what about whom."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

By conceiving of socialization as a process related to "patterns of access to information," we are able to approach the study of media effects from a new perspective. While many studies have examined the effects of media *messages* on people at specific stages of socialization, very few studies have examined how changes in media environments may affect the structure of the socialization process itself. One way to do this is to look beyond specific messages and examine how different media may create different "situational geographies" for the worlds of childhood and adulthood.

By focusing below on the potential effects of a shift from "book situations" to "television situations," I do not mean to obliterate other explanations for recent changes in socialization or to dismiss the many factors that work to maintain traditional distinctions between childhood and adulthood. Certainly, the growing instability of marriages, economic issues, and many other variables contributes to recent changes; conversely, family traditions, religious beliefs, schooling, social class, and place of residence mute and channel many of the pressures toward merging age-related roles. I merely hope to show that changes in media may have much more to do with overall trends in conceptions of childhood and adulthood than is generally assumed.

Put differently, the subject of the remainder of this essay is not change in socialization and many of its possible causes; the subject is change in media and many of the ways such change may influence age-related roles. The analysis here should be interpreted the same way findings in an experiment on the effects of a chemical known to have been added recently to drinking water nationwide might be interpreted. This chemical may be found to increase heart rate and metabolism, for example, but such a fact does not mean that there are no other variables that may have similar effects, and it does not mean that there are no other drugs, foods, or family habits that might moderate or offset the effects of the chemical. The qualifier that must be used to defend the cause-effect linking in all experimental findings is "all other things held constant." The scholar using an analytical method must often use a similar disclaimer when studying the potential effects of a single variable. In what follows, I try to indicate the *direction* of television's effects on age-related roles—all other things held constant.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

AT HOME IN TELEVISION LAND

At one time, what the young, preschool child knew about the world was determined primarily by where he or she lived and was allowed to go. The child's experience was often limited to the home and the surrounding area. As the child learned to read and gained proficiency in it, and as the area in which he or she was free to travel about expanded, the child gained access to the larger society—reading offering informational access, and travel physical access, to the world.

The family home has traditionally been portrayed as a protective and nurturing environment. In modern urban societies, however, the family home has functioned as a very *restrictive* environment as well, and in this way has limited the experiences of children. Charlotte Perkins Gilman, an early feminist writer, attacked the home as a prison, one that restricted both children and women from the outside world.[24] Even those who support the traditional function of the home recognize implicitly its limiting aspect. In *The Sociology of Childhood,* Oscar Ritchie and Marvin Koller note that the home is the child's "small world" and that the "family serves as a screen to the culture of its society and selects only those portions that it deems worthy of attention."[25] The child of course is not completely isolated from information about the outside world, but this information is generally filtered through parents and other adults who are allowed to leave the home freely. Because of the sharp limitations on the child's experience of social reality, Ritchie and Koller observe, visitors from the outside world often become a center of interest and fascination. "As a person who lives outside the child's home, the guest functions as a transmitter, bringing into the world of the child new ideas and information, and new and different opportunities for vicarious participation in the outside world."[26]

The "transmitter" metaphor is an interesting and significant one, revealing, as it does, a weakness in Ritchie and Koller's own description of the role of the family and home in socialization. They were writing in 1964, and should have realized that in over 90 percent of American households at that time, the home environment they describe was no longer restrictive, having already been transformed by a new and powerful transmitter—television. They note that "largely because parents control the situation, the child-guest relationship is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

likely to be a positive aspect of socialization."[27] Yet, the traditional family guest is invited, remains under family control, and acts as an adult filter on child information, while the guests who come through the television set are often uninvited visitors who broaden the child's informational world without the parents' full approval or control.

The impact of television on the redefinition of "home" is all but lost in the dominant message-oriented approach to the study of television. The focus on content rather than on situational structure has obscured the ways in which television bypasses the filters of adult authority and decreases the significance of the child's physical isolation in the home.

In one sense, it makes little difference whether children's programs reinforce the message that "adults always know best" or the message that "adults don't always know best," or whether a commercial tells children to buy a product themselves or to ask their parents to do it for them, since, regardless of the specific messages in programs and advertising, the pattern of information flow into the home has changed. While young children once received virtually all of their information about the outside world from their parents, television now speaks directly to them, with the result that power relationships within the family are partially rearranged. Television's messages have a significant impact—again, regardless of specific content—because they take children beyond the informational limitations once set by walls and parents.

Certainly, today's parents still control much of the atmosphere of the family home. Yet, while homelife was once the base of all the child's experiences, children who have television sets now have outside perspectives from which to judge and evaluate family rituals, beliefs, and religious practices. While parents could once easily mold their young children's upbringing by speaking and reading to children only about the things they wished their children to be exposed to, today's parents must battle with thousands of competing images and ideas over which they have little direct control. The influence of parents and family life continues to be seen, of course: children still differ markedly by class, religion, and ethnic background. But the family is no longer an all-powerful formative influence.

Very young children were once limited to the few sources of information available to them within or around the home: paintings, illustrations, views from a window, and what adults said and read

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to them. Now television escorts them across the globe even before they have permission to cross the street. One of the reasons many children may no longer seem to "know their place" is that they no longer *have* a place, in the sense of an isolated environment that largely restricts their access to adult situations and secrets.

"CHILDREN'S TELEVISON"—THERE'S NO SUCH THING

Access to television and access to books are two quite different things. Reading and writing involve an abstract code of arbitrary and semantically meaningless symbols. To read and write efficiently, these symbols must be memorized, practiced, and internalized. The complexity of print's code excludes very young children from virtually all communications in print. In a sense, print creates "places" where adults can communicate with one another without being overheard by children. Through books, adults can privately discuss things they may wish to keep hidden from young children. Furthermore, because reading involves a complex skill that is learned in stages, adults can control the information given to children of different ages by varying the complexity of the code in which books on various subjects are written. Because children must read simple children's books before reading complex adult books, print allows for the separation of people of different ages into different informational worlds.[28]

The varying complexity of the code in print not only serves to isolate children from adult situations, but works as well to isolate adults from children's situations. Children, for example, can be shielded from "adult" topics such as sex, crime, and death simply by encoding this information in long, difficult words and complexly written sentences. At the same time, however, the content of most children's books is so simple that adults find them uninteresting and would be embarrassed to be seen reading them. (Indeed, finding appropriate material to use in teaching illiterate adults to read is a major problem.) Children usually do not know what adults are reading, and adults (unless they are schoolteachers or parents who read books aloud to children) usually do not know what children are reading. With print, a society tends to be divided into many different information systems based on differences in the mastery of reading skills.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Children's books" are special, then, for two significant reasons: they are the only type of books many children can read, and generally, only children read them. In this sense, children's literature is a kind of informational ghetto, both isolated and isolating.

There is no situational equivalent to a children's book on television. Television has no complex access code to exclude young viewers or to divide its audience into different age groups. Adult programs may present children with information they do not fully understand, and children's programs may contain childish content, but the basic code in which all programs are presented is similar for every television show: pictures and sounds. Unlike print, television's symbolic form resembles the things it represents. Television pictures—like all pictures—look like real objects and people; televison speaks in a human voice. While children under the age of eleven or twelve may not fully understand television in an adult sense, they still find television accessible and absorbing. Children from two to five spend very little time staring at words and sentences in a book, but over the last few years, they have spent an average of between twenty-five and thirty-two hours a week watching television.[29]

In contrast to books, television programs have few, if any, "prerequisites." There is no set order in which programs must be viewed, because most programs require the same degree (or lack) of skill. One does not have to watch "Romper Room" before watching "Sesame Street"; one does not have to watch "The Muppets" before watching "Dallas." With television, there is no media filter to shield children from exposure to adult programs, and there is no simplistic visual style to bore adults when they watch children's programs. It is no surprise, then, that people of all ages tend to watch many of the same programs. In recent years, "Dallas," "The Love Boat," and "The Muppets" have been among the most popular programs in *all* age-groups in the country.[30] While the world of children's books can be insulated so that children are shown only an idealized view of life, television news and entertainment present to young children images of adults who lie, drink, cheat, and murder.

What is revolutionary about television, then, is not that it gives children adult minds, but that it allows the very young child to be "present" at adult interactions. Television removes barriers that once divided people of different ages and reading abilities into different social situations.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The widespread use of television, therefore, is equivalent to a broad social decision to allow young children to be present at wars and funerals, courtships and seductions, criminal plots and cocktail parties. Young children may not fully understand the issues of sex, death, crime, and money that are presented to them on television. Or, put differently, they may understand these issues only in child-like ways. Yet television exposes children to many topics and behaviors that adults have spent several centuries trying to keep hidden from them. Television thrusts children into a complex adult world, and it provides the impetus for them to ask the meanings of actions and words they would not yet have heard of, or read about, without television.

Not only are most children able to watch adult programming, but from the very beginning of the television era, they have *preferred* it.[31] According to one recent study, even the best available children's program cannot compete with adult programs for the child's interest.[32] Nevertheless, many parents naively continue to demand more "children's programming" on television or look forward to the more age-specific programming of cable, direct satellite-to-home broadcasts, and videodiscs. But a separate information system equivalent to the isolated world of children's books will not come into being simply by creating television programs that contain content traditionally thought suitable for children. Nor can it. There is, in fact, no children's television as distinct from adult television. There is simply "television."

THE TELEVISION DOORWAY

Many of the physical characteristics of books serve as filters for the information made accessible to children. Each book is a distinct object that a child must acquire individually. If the book is not given to the child by a parent, the child must leave the house and borrow or buy it—usually from an adult. The special library cards given to children prevent them from borrowing adult books, and these books are often placed on shelves beyond a child's reach. Moreover, children have little knowledge of what books are available or where to get them.

As individual objects, books can be selectively chosen and selectively given to children. But television content is much more difficult

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to control. Once the child has access to a television set, he or she has direct access to everything that comes through it. The child does not have to go anywhere special to find a television program or necessarily ask any adult to see it. While the reading code and physical characteristics of books provide "automatic" constraints that require minimal parental intervention, effective censorship of children's television viewing would involve active and constant monitoring. With television, therefore, the important decision is whether to have a television set or not, whether to expose children to almost *all* of television's offerings or *none* of them.

Furthermore, because the child has not brought the specific program into the house, there is little guilt by association with a television program. For a child to buy a cheap novel or a "dirty book" and bring it into the house is to associate with its content; to watch such a television show is merely to view innocently what has been piped into the home (and what must be, from the child's perspective, implicitly sanctioned by the parents, who provide the television set, and by the larger society, which presents itself through this medium).

A child's book is like a guest in the house. It makes a "social entrance"; that is, it comes through the door and remains under at least nominal parental authority. As a physical object, it must be stored somewhere in the house—whether on a coffee table or under a mattress—and it can be discarded. The child's television set, in contrast, is like a new doorway to the home. Through it come many welcome and unwelcome visitors: schoolteachers, presidents, salesmen, police officers, prostitutes, murderers, friends, and strangers.

Parents who tackle the monumental task of censoring their children's television viewing are faced with at least two significant dilemmas. First, controlling viewing involves a conflict of values: protecting children versus allowing them to learn as much as they can. Parents once had to encourage children to read and learn. A good deal of the protection from adult information in books was taken care of automatically by the inherent features of print. Now parents find themselves in the uncomfortable position of actively intervening in the learning process of their youngsters. Parents must now try to evaluate the content of television and decide—often on the spot—whether their children can handle it.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Second, for parents to control their children's viewing of television very often means limiting their own. While a child has virtually no access to the books being read by adults in the same room, a television program being watched by adults in the room the child is in is accessible to the child. Many children are exposed to adult news, for example, because their parents watch the news during dinner.[33] To control children's viewing, therefore, parents must either limit their own or physically divide the family. The situation of course is further complicated when there are several children of different ages in the household.

The unique characteristics of books make it possible for adults to enforce the implicit rule, "Read what we want you to read about, not what we read about," but television offers little support for a like admonition. Reading, a family can stay together in a single room and yet be divided into different informational worlds. In households that have more than one television set, children and adults can be in different rooms and still be united into a single informational arena.

EXPOSING THE "SECRET OF SECRECY"

There are many books for parents that discuss what books are suitable for children. This is essentially an adult-to-adult interaction that is closed to young children, and in fact, most children are even unaware that such books exist. With the help of such private adult "discussions," children were once shielded from certain topics such as sex, money, death, crime, and drugs, and shielded, furthermore, from the very fact that they were being protected. Print allowed for an "adult conspiracy."

This does not hold for television. It is true that television frequently offers advice to parents. Talk shows discuss children's television, and warnings are placed at the beginning of programs to let parents know that a program may contain material "unsuitable" for preteenagers. Yet, while the content is similar to that of books which give advice to parents about children's literature, the structure of the communication situation is radically different: television discussions and warnings are accessible to children. Ironically, then, such advice on television often cues children to programs they are not supposed to see and increases their interest in what follows. Even if such warn-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ings are also heard by parents, and even if parents act to censor a program, parental control is nevertheless weakened because the control becomes overt, and therefore often unpalatable to both children and adults. Visible censorship is the weakest form of control.

Once television provides children with the certain knowledge that adult secrets concerning children exist, complete and immediate comprehension of adult behavior is of secondary importance. The knowledge that a secret exists is half the secret. Once its existence is revealed, claims that "I'm not supposed to tell you" or "It's a secret" generally lead to the demand for revelation. It is not necessary for television to reveal *all* of the secrets of adults; children already know a great deal about traditional adult roles just by knowing for certain that adults consciously conspire to hide certain things from them. Television, then, may have its greatest effect on children's knowledge and behavior when adults use television forums (such as talk shows) to discuss how to control television's effects on children.

Contrary to many claims, therefore, children's access to adult information through television is not simply the result of a lapse in parental authority and responsibility. Print provides many filters and controls that television by its very nature cannot. No matter what parents do, short of removing the television set altogether, the old information environment cannot be fully reinstated. And even if the set is removed from one child's home, there are certainly sets in the homes of friends and relatives.

Parents may be somewhat helpless in the face of television, but surely, regulation of what broadcasters are allowed to show on television will have a tremendous impact on what children know and learn. If, for example, only conservative programs such as "Little House on the Prairie" or "Leave It to Beaver" are permitted, and shows such as "One Day at a Time," "Different Strokes," and "Silver Spoons" are banned, won't children be provided only with the information traditionally given to them in books? Not necessarily.

Certainly, different programs have different effects. But the difference in impact is not as great or as simple as is generally assumed. While traditional shows such as "Leave It to Beaver" are, in manifest content, more conservative than newer programs such as "One Day at a Time," the two are, in one sense, very similar in terms of what they reveal to children about adult life.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Traditional distinctions between child and adult behavior depend not only on the restriction of what children know about adult topics such as sex, murder, death, and money, but also upon the restriction of what children know about adult *role-playing*. To borrow from the theater, traditional children's books presented children with an "onstage" view of adulthood, wherein parents were all-knowing, calm, cool, and collected; children were never exposed to the "backstage" view of adulthood, wherein adults displayed doubts, anxieties, fears, childish behaviors, arguments, sexual activity, illness, *and* preparation for, and relaxation of, their parental roles.[34] Children, in fact, were shielded from the *knowledge* that such a backstage area even existed. They were presented with the onstage role as the reality. The secrecy surrounding the adult backstage not only kept children innocent, but also allowed adults to "stage" a very formal image of adulthood, since the larger an actor's rehearsal and relaxation area, the more formal and confident the performance.

Yet even traditional, conservative television programs tend to reveal a backstage (or perhaps a "sidestage") view of adulthood. Child viewers see adults moving from backstage to onstage, behaving one way when they are with their peers and another when they are with children. The parents are shown as cool and rational with their children, but when they are by themselves, they display doubts and anxieties, and agonize over "what to do with the kids."

While the child *portrayed* on traditional television shows may be innocent and sheltered, the child *watching* the programs sees both the hidden behavior and the process of concealing it from children. "Father Knows Best," for example, exposed child viewers to the ways in which a father and mother manipulate their behavior to make it appear to their children that they "know best." This view is very damaging to the traditional adult role.

The behavior in the revealed adult backstage may be idealized and fictionalized, but from a social dynamics perspective, what is significant is the revelation of the existence of the backstage itself. If nothing else, children are shown through traditional television programs that adults "play roles" for children. This is a dramatic discovery. Children old enough to understand basic deception learn that the behavior adults exhibit before them is not necessarily their "real" or only behavior. (It is no surprise that the generation which grew up watching "Father Knows Best" and other traditional programs be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

came so concerned with the issue of "credibility" and the gap between private and public behaviors.)

As a result of such views of adulthood, children may become suspicious of adults and more unwilling to accept all that adults do or say at face value. Conversely, adults may feel "exposed" by television, and in the long run, it may no longer seem to make as much sense to try to keep certain things hidden from children. Indeed, traditional "adulthood" was not something that simply developed as people grew older; it was also a behavioral style that was supported by being able to hide many childlike behaviors in a private backstage area. As television blurs the dividing line between the backstage and onstage areas of adulthood in our culture, many childlike behaviors emerge into the new public adult role. Television's exposure of the "staging of adulthood"—with its secret-keeping and secret of secrecy—therefore undermines both traditional childhood naiveté *and* the all-knowing confident adult role, and fosters the movement toward a uni-age behavioral style.[35]

LITERACY AND THE "INVENTION" OF CHILDHOOD AND ADULTHOOD

If television can alter the social meaning of childhood and adulthood, then it stands to reason that these life stages, as they have been defined for many generations in our culture, are not natural or necessary states of being. Indeed, the above arguments rest heavily on the plausibility of the notion that our old views of childhood and adulthood were dependent, at least in part, upon print and could not have existed in quite the same way in a primarily oral society.

The history of childhood is a relatively new field, yet there is already striking, if preliminary, support for the idea that our traditional concept of childhood was related in great measure to printing. While the various studies of childhood point to many fluctuations in attitudes toward children across time, country, class, and religion, one relatively consistent theme that emerges is that of a major shift in attitudes toward children beginning among some classes in the sixteenth century, the same century that saw the spread of literacy and printing in the vernacular throughout Western Europe. Before that time, little special attention was paid to children. From the sixteenth to the twentieth century, however, children were increas-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ingly isolated from adult society and perceived as a separate group requiring special care, protection, and restriction.

In the best-known work on the subject, *Centuries of Childhood*,[36] Philippe Ariès advances the rather startling argument that childhood was "invented" in the sixteenth century. According to Ariès, prior to that time, the notion of childhood as a separate time of life simply did not exist. More precisely, age did not define social status or role. Once past infancy, children began to participate in adult activities and learned about life through direct experience.

Children often worked beside adults, drank in taverns with adults, went to war with them, and shared their beds. Adults and children played the same games. Neither had a distinct style of dress, and there were no topics, words, or activities from which children were to be shielded. The few formal schools that existed (primarily to train clerics) were not divided into separate classes, and it was not unusual for a ten-year-old to sit next to a twenty-year-old in class. Young students lived where they could find lodging, bore arms, drank, and gambled.

Ariès study is mostly of France, but his observations find their echo in other European countries. Lawrence Stone, for example, notes that before the sixteenth century, English children were often neglected or ignored by their parents, who sent them away from home when they were seven or eight, usually to work in the home of another family. The child's world was essentially that of the adult. Children saw deaths and executions, witnessed sexual activities, and often engaged in sex play themselves.[37] Thus, while children have always existed in the physiological sense, the preprint oral society of Western Europe accorded them few special social roles or behaviors.

Beginning in the sixteenth century, however, a new concept of children began to take hold; from relatively independent persons, they became weak, innocent beings in need of special care, love, discipline, and protection from evil. No longer were they to be exposed to violent and vulgar folktales as before, since they were now considered to be too innocent to share fully in "adult" information. Clerics began to demand that children should read only expurgated versions of the classics. Special etiquette books for children were printed, along with separate guides for their parents. The idea of supervising children at all times and restricting their wanderings and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

activities began to grow. Moralists began to speak against the mixing of ages in schools, and the school slowly evolved into a strictly age-graded structure. Precocity, which was once as valued as it was common, began to be seen as a dangerous disease. Children's ages more and more determined what they should know, where they could go, and what they could do.

Stone notes that the "innocence" of children, first discussed by humanists in the Renaissance, was quickly "interpreted as liability to sin,"[38] and Ariès suggests that childish innocence led to "safeguarding it against pollution by life."[39] But while children began to be protected from aspects of adult life, they were not at first isolated from death. For years, fear of death and eternal damnation were used to scare children into piety. Children were taken to see hangings and corpses, and encouraged to "convert" to Christianity before it was too late.

Later, the new attention paid to children would evolve into the more modern "maternal, child-oriented, affectionate and permissive mode."[40] The change occurred at different times in different countries, classes, and religions. But by the nineteenth century, the belief in "infant depravity" and the need for young children to undergo "conversions" to Christ were generally abandoned in favor of views of children as, at worst, morally neutral, and at best, angelic redeemers of adult sinfulness.[41]

Despite the varied treatment of children from the sixteenth through the early twentieth centuries, the entire period was set apart from both earlier periods and from present trends by an underlying consistency: children were seen as a distinct category of people to be isolated from the adult world and segregated in their own institutions and subculture. Why was this so? Why did this notion of children develop in the sixteenth century, and how can we account for its decline today?

There are, no doubt, multiple reasons for so fundamental a shift in the social conception of children, but the analysis presented here supports the view that the spread of printing and literacy may have been prime factors in the development of the "innocent" child. To share fully in the literate adult world, a child had to learn to read.

Many other features of the spread of childhood, as described by Ariès and other historians, support this analysis. Childhood as a separate period of life developed first among the middle and upper

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

classes, as did literacy. Boys were thought of as children long before girls—perhaps because boys were sent off to school to learn to read and write, while their sisters stayed home and immediately took on the dress and tasks of adult women.

In the lower classes, which were for the most part illiterate, the new concepts of childhood took hold only much later. In the nineteenth century, many uneducated children worked in factories beside their parents. John Sommerville notes the irony that the nineteenth century saw both the heights and depths of childhood. As the children of the educated were being glorified with their own subculture of books and toys, the children of the poor and illiterate were providing the labor to support this subculture. Publishers, for example, hired children of the lower class to hand-tint engravings in the growing numbers of books for middle-class children.[42]

The increasing influence of books throughout the period led to changes in their form that reinforced the new belief in the distinctness of children. In the eighteenth century, children's books began to shift away from pedantic moral instruction and joyless drill to books of entertainment and unworldly play. A whole subculture for children developed: books and fairy tales, toys, birthday celebrations, and nursery rhymes. As education became more nearly universal in the late eighteenth and nineteenth centuries, childhood was extended to the lower classes. Children were sent to school at an earlier age and remained longer. Age-grading of both children and lessons became stricter and stricter.[43]

There are many implicit suggestions in the historical literature of the possible role of literacy in the increasing segregation of children and adults; it is therefore odd that most historians have nothing explicit to say about it. Stone notes that new approaches to children developed first among the most literate groups, but he attributes this to the openness of literate peoples to "innovations." Furthermore, while he suggests that the greater spread of literacy among men may have led to a decrease in the relative status of women, he fails to extend this argument to its obvious implications for the changing status of children and adults. Nevertheless, Stone does observe—without analysis—how a new concern over children's proper education led parents to "interfere" with children's freedoms in new ways.[44] And the general data presented by Stone and other historians suggest that the growth and spread of schooling was paralleled by a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

growing belief that certain things should be kept hidden from children.

Sommerville also provides some inadvertent clues to the role of literacy in the advent of childhood. He notes that before the spread of literacy, people of all ages enjoyed listening to what we today call nursery tales. "What has changed since then is that adults have 'grown up' and have left these stories to children. Partly, this has been the result of literacy, which develops man's critical abilities but shrivels his imagination. . . . It may be that adults were more childlike in the early years of the modern era."[45]

Elsewhere Sommerville notes that changes in community traditions occurred when "adults became too grownup and inhibited to take part in the songs, games, and dancing that had once bound the various age groups together."[46] Yet, while Sommerville briefly suggests that literacy is responsible for making adults less childlike, he neglects to consider the other side of the coin: that literacy may have made children seem less adultlike.

To my knowledge, the only historian who has explicitly linked literacy with the invention of childhood is Elisabeth Eisenstein. In her extensive analysis of the impact of printing on Western culture, she briefly suggests several ways in which printing fostered the age-grading of students and the separation of children and adults. The mechanical aspects of printing and the resulting potential for technical precision, she suggests, caused a general fascination with system, method, and *sequence*. Moreover, the growth of the printing industry allowed for segregation of markets and audiences. Some books began to be aimed only at teachers or parents, while "textbooks were newly designed to take students in sequence from the most elementary to the most advanced level of a given skill." Eisenstein suggests that new views of childhood may have been related to the significant transition from "learning by doing" to "learning by reading." "As a consumer of printed materials geared to a sequence of learning stages, the growing child was subjected to a different developmental process than was the medieval apprentice, ploughboy, novice or page."[47]

Printing and spreading literacy, says Eisenstein, also created a new way of "adult thinking" based on "cumulative cognitive advance and incremental change," that, in effect, created childhood by default. "Indeed the more adult activities were governed by conscious

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

deliberation or going by the book, the more striking the contrast offered by the spontaneous and impulsive behavior of young offspring, and the more strenuous the effort required to remold young 'bodies and souls.' "[48]

These many clues to the link between literacy and the development of "childhood" and "adulthood" further support the argument that television may be a prime factor in the current evolution toward more homogenized adult/child roles.

* * *

The argument that different media of communication foster different conceptions of "childhood" and "adulthood" may at first seem facile and mystical. Yet it is logical to argue that similarity of social status is dependent upon ability to participate relatively equally in social interaction and that such participation depends on communication skills. In the primarily oral society of the Middle Ages, children may have been seen as less distinct from adults because by the age of seven or eight, children generally master the basics of speech. Printing and literacy may have given a boost to the Renaissance, but they also created a new and lasting dark age for the young and illiterate.

The medium of print removed the child from the adult world in a manner and to a degree inconceivable in an oral culture.[49] To learn what adults knew, to be able to join adult interactions in print, now required many years of schooling and training. Printing allowed for all-adult interactions in which parents and teachers could "privately" discuss how to treat children, what to teach them, and what to keep from them. It is no surprise, then, that the image of the weak and naive child should have developed alongside the growing impact of printing. Children were suddenly considered very "innocent," not immediately in the moral sense (which developed later), but in the sense of innocence of experience and knowledge. Conversely, adults gained in image and prestige as they were increasingly able to conceal their doubts, anxieties, and childish behaviors from children.

Of course, if television does undermine the traditional "staging of adulthood" that was fostered by print, then the undermining pro-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cess must have begun with earlier media such as film and radio. Yet neither film nor radio has all of the characteristics that make television a potent merger of child and adult situations. While movies, like television, have an accessible audio/visual code, the child has to leave the home and travel through the adult world to pay for and see a movie. This precludes viewing by very young children, who spend many hours a week in front of the television set. Even for the older child, the choice to see a *particular* movie is quite distinct from the random flip-of-the-dial television-viewing that provides children with information they have not directly sought. Similarly, while radio is, like television, a new doorway to the home, its code is wholly aural and verbal; a listener needs to fill in the pictures based on *past experience*. This requirement obviously puts the inexperienced child at a disadvantage. Furthermore, radio's reliance on language often takes it to the realm of high-level abstractions that cannot easily be *pictured*. Television, on the other hand, tends to turn to the more tangible (and less impressive and mystifying) aspects of everyday social behavior.

With television today, the form in which information is transmitted in our society once again conspires against controlling what children know about adulthood and adult roles. Children still pass through a sequence of cognitive and physiological phases, but the social stages of information access have been blurred. In television, there is no set sequence in the level or type of information accessible. It bypasses the hierarchy of information access supported by stages of reading literacy and the age-specific grades of the school system. Indeed, the whole fascination with linear "sequences" and "stages" that printing encouraged seems to be disappearing from our culture.

While critics have attacked television for weakening children's willingness and ability to learn to read, television may undermine the *structure* of the traditional school system more than it undermines its particular lessons. The age-graded structure of the school not only gives children in each age-group certain information, but also consciously holds back information. Such a system cannot easily accommodate children who, through television or other sources, have gained access to social information in no particular pattern or sequence. While the school continues to have many valuable lessons to teach children, it can no longer assume that children who cannot

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

read know little about adult behavior, and it cannot assume that even children in the early grades will be willing to accept the idealized and mythologized versions of reality that were designed for "innocent children."

As I said earlier, the effects of television are muted and shaped by many factors—religion, class, race, region, and education. In addition, the continuing importance of literacy in our culture places a limit on how homogenized childhood and adulthood can become. Yet the old sharp distinctions in the roles of people of different ages can no longer be maintained. Television has had a tendency to blur traditional distinctions in age-related roles by making it much more difficult for adults to maintain different informational and behavioral worlds for people of different ages. Just as we cannot clearly distinguish between the social statuses of students of different ages if we teach them all in the same classroom, neither can we make very sharp distinctions in status if we expose everyone to similar information through television.

Clear differences in social status often rely on lack of intimate knowledge of "the other." If the mystery and distance disappear, so do many formal behaviors. In the shared environment of television, children and adults know a great deal about one another's behavior and social knowledge—too much, in fact, for them to play out the traditional complementary roles of innocence versus omniscience.

ENDNOTES

This essay is based on a chapter of my book, *No Sense of Place: The Impact of Electronic Media on Social Behavior* (New York: Oxford University Press, forthcoming). These ideas were first developed in my doctoral dissertation completed at New York University in 1978 and made available through University Microfilms in 1979. This research was supported in its later stages by a Central University Research Fund grant from the Research Office at the University of New Hampshire and by a Summer Faculty Fellowship from the graduate school of the same institution.

[1]For statistics on the rapid increase in teenage sexual activity, drug abuse, alcoholism, abortion, and suicide, see *Teenage Pregnancy: The Problem that Hasn't Gone Away*, by the Alan Guttmacher Institute (New York: Alan Guttmacher Institute, 1981); Lloyd D. Johnston, Jerald G. Bachman, and Patrick M. O'Malley, *Student Drug Use in America, 1975-1981* (Rockville, Md: Department of Health and Human Services, 1981); and "Adults Are Failing, Not the Children," *USA Today*, February 1984.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[2]William Beardslee and John Mack, "The Impact on Children and Adolescents of Nuclear Developments," in *Psychosocial Aspects of Nuclear Developments,* American Psychiatric Association Task Force Report no. 20 (Washington, D.C.: American Psychiatric Association, 1982), pp. 64–93.

[3]For indications of the new attitude toward children and childbirth, see, for example, Tracy Hotchner, *Pregnancy and Childbirth: A Complete Guide to a New Life* (New York: Avon, 1979).

[4]William Watts, "The Future Can Fend for Itself," *Psychology Today,* September 1981, pp. 36-48.

[5]See, for example, the interview with Kenneth Keniston, director of the Carnegie Council study on children, "More Rights for Children: What an Expert Says," *U.S. News & World Report,* October 31, 1977, p. 33.

[6]See, for example, Judy Blume, *Superfudge* (New York: Dutton, 1980).

[7]Serena Stier, "Children's Rights and Society's Duties," *Journal of Social Issues 34 (2)* (1978): 48.

[8]Lynn Langway et al., "A Nation of Runaway Kids," *Newsweek,* October 18, 1982, pp. 97-98.

[9]Mark Blackburn, "Teen-Agers Leave Home—Legally," *The New York Times,* February 20, 1980.

[10]Comparison of the FBI's 1951 and 1981 *Uniform Crime Reports for the United States and Its Possessions* (Washington, D.C.: Department of Justice) indicates a phenomenal increase over the last three decades in the proportion of arrests for murder (up 500 percent), robbery (up 1,750 percent), and rape (up 4,000 percent) that involve children under the age of fifteen—even as the corresponding Census Bureau reports, *Statistical Abstracts of the United States* (Washington, D.C.: U.S. Government Printing Office), indicate that the proportion of the population in that age-range has decreased. At least part of this apparent change in criminal activity may be attributable to a change in the *reporting* of crimes committed by children, but even such a trend would suggest a significant shift in conceptions of "childhood."

[11]Linda Greenhouse, "Pragmatism Brings Changes in the Juvenile Justice System," *The New York Times,* February 18, 1979.

[12]Ibid.

[13]For a discussion of the current controversy over criminal responsibility and "irresistible impulse," see Willard Gaylin, *The Killing of Bonnie Garland: A Question of Justice* (New York: Simon & Schuster, 1982), pp. 245-71, and the chapter, "Criminal Intent and Responsibility," In John Monahan and Laurens Walker, *Social Science in Law: Cases, Materials and Problems* (Mineola, N.Y.: Foundation Press, forthcoming).

[14]Stier, "Children's Rights and Society's Duties," p. 49.

[15]Peter Kihss, "2 Children in Foster Care Named to City Panel to Improve System," *The New York Times,* June 11, 1979.

[16]See, for example, Elise Boulding, "Children's Rights," *Society,* November/December 1977, pp. 39-43, and Marian Wright Edelman, "In Defense of Children's Rights," *Current,* April 1978, pp. 16-20.

[17]Richard Farson, *Birthrights* (New York: Macmillan, 1974).

[18]John Holt, *Escape from Childhood* (New York: Dutton, 1974), p. 18.

[19]Ruby Takanishi, "Childhood as a Social Issue: Historical Roots of Contemporary Child Advocacy Movements," *Journal of Social Issues* 34 (2) (1978): 8-28.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[20]In *Childhood: Pathways of Discovery* (London: Harper & Row, 1980), p. 53, for example, psychologists Sheldon and Barbara White note that age is "a profoundly unbiological fact about a child" that merely represents the number of times the earth has circled the sun since the child was born. Describing development in terms of age-ranges, then, is only an easy way of summarizing or averaging developmental changes; children of the same age often have very different abilities. The Whites suggest that Piaget's age-related cognitive stages are the weakest part of his theory. "All the evidence shows that there are no sudden and total transformations in a child's thinking at any age." Other psychologists have pointed out the problems in *any* studies that describe behavior as a function of age. See, for example, Joachim F. Wohlwill, "The Age Variable in Psychological Research," *Psychological Review* 77 (1970): 49-64. As Wohlwill and others note, age is unlike other presumed behavioral "causes" in that a person's age is not something that can be manipulated by a researcher, and therefore the effects of age cannot actually be tested experimentally. Further, for many practical reasons, most developmental studies cannot even follow the lives of subjects over many years. Instead, within a short time period, people who are age X (four years old, for example), are compared to those who are age Y (nine years old). There is no direct evidence in such studies that in five years the four-year-olds will respond the way the nine-year-olds do now, or that the latter were similar to today's four-year-olds five years ago. The developmental *process* must be inferred, and serious mistakes are possible. As Ralph L. Rownow notes in *Paradigms in Transition* (New York: Oxford University Press, 1981), people were taught for many years that intelligence declined with age. But this belief was based on the results of intelligence tests given to people of different ages *at the same time*. The differences in scores were assumed to be related to age when they were probably due to economic and social change (pp. 90-91).

[21]See, for example, Daniel J. Levinson et al., *The Seasons of a Man's Life* (New York: Knopf, 1978) and Gail Sheehy *Passages: Predictable Crises of Adult Life* (New York: Dutton, 1976).

[22]When I began speaking and writing about the merging of childhood and adulthood as part of my doctoral research in the mid-1970s, my observations and analyses were often greeted with hostility and ridicule. I was frequently lectured on the "naturalness" of childhood as "proven" in developmental research. In the last few years, the changes in childhood have become more numerous and explicit, and a number of others have written about them. David Elkind has described *The Hurried Child* (Reading, Mass: Addison-Wesley, 1981), Marie Winn has written of *Children Without Childhood* (New York: Pantheon, 1983), and Neil Postman—one of the faculty sponsors of my doctoral dissertation—has described the *Disappearance of Childhood* (New York: Delacorte, 1982). But even these writers tend to view the current changes as negative distortions of "proper" child-adult roles.

[23]For a discussion of the relationship between variable patterns of information flow and the variable structure of roles of group identity, socialization, and hierarchy, see chapter 4 of Meyrowitz, *No Sense of Place.*

[24]*The Home,* reprint of 1903 edition (Urbana: University of Illinois Press, 1972), p. 75.

[25](New York: Appleton-Century-Crofts, 1964), pp. 86, 109.

[26]Ibid., p. 103.

[27]Ibid., p. 105.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[28]There is of course, nothing inherent in print which *demands* that adults use books to shield children from certain information. It is possible, for example, to revise children's books and substitute sentences such as "See Mrs. Smith feed the children milk and cookies" with "See Mrs. Smith go to bed with the milkman." Yet print *allows* adults to control what and how much children know about adult situations. And general observation of social behavior suggests that when people can control access to private behaviors, they often do so. As television's exposure of adult secrets to children has bypassed the traditional censoring process, however, many authors have begun to include "adult" topics such as homosexuality, death, abortion, and prostitution in children's books.

[29]See the 1980 to 1983 editions of the *Nielsen Report on Television* (Northbrook, Ill.: A.C. Nielsen Co.) for recent levels of child viewing.

[30]Ibid., 1981, pp. 14-15.

[31]For examples of early studies that demonstrated this point, see Robert Lewis Shayon, *Television and Our Children* (New York: Longmans, Green, 1951), p. 27, and Hilde T. Himmelweit, A.N. Oppenheim, and Pamela Vince, *Television and the Child: An Empirical Study of the Effects of Television on the Young* (London: Oxford University Press, 1958), pp. 13-15.

[32]James G. Webster and William C. Coscarelli, "The Relative Appeal to Children of Adult vs. Children's Television Programming," *Journal of Broadcasting* 23 (1979): 437-51.

[33]Charles Atkin found that about 30 percent of kindergarten through fifth-graders claimed they watch a national news program "almost every day." "Broadcast News Programming and Child Audience," *Journal of Broadcasting* 22 (1978): 47-61.

[34]See Erving Goffman, *The Presentation of Self in Everyday Life* (New York: Anchor Books, 1959), for a "dramaturgical" analysis of social interaction. For an extension of the model to an analysis of the effects of changes in media on a wide spectrum of social performances, see Meyrowitz, *No Sense of Place*.

[35]It would be possible, of course, for adults to choose to present on television only those programs that contain information available in traditional children's books. Yet, unlike books, television programs cannot be easily aimed at particular age groups. Adults must either abandon television to their youngest children or share most of their programs with children of all ages. The decision of what to put on television, then, parallels the speech and behavioral decisions of a large family that lives in one room: to control what a child of one age experiences is also to control the experience of the other children and adults, and almost any information suitable for older children and adults exposes young children to "adult secrets."

[36]*Centuries of Childhood: A Social History of Family Life* (New York: Vintage Books, 1962), translated by Robert Baldick.

[37]*The Family, Sex, and Marriage in England 1500–1800* (New York: Harper & Row, 1977).

[38]Stone, *The Family, Sex, and Marriage*, pp. 14, 174.

[39]Ariès, *Centuries of Childhood*, p. 119.

[40]Stone, *The Family, Sex, and Marriage*, p. 405.

[41]Bernard Wishy, *The Child and the Republic: The Dawn of Modern American Child Nurture*, (Philadelphia: University of Pennsylvania Press, 1968), pp. 85, 108.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[42]John Sommerville, *The Rise and Fall of Childhood* (Beverly Hills, Calif.: Sage, 1982), pp. 145, 160.
[43]Ibid., pp. 136-47, 189-208.
[44]Stone, *The Family, Sex, and Marriage,* pp. 449, 158, 216. For an analysis of the potential effects of literacy and electronic media on gender roles, see chapter 12 of Meyrowitz, *No Sense of Place.*
[45]Sommerville, *The Rise and Fall of Childhood,* p. 136.
[46]Ibid., p. 182.
[47]Elisabeth L. Eisenstein, *The Printing Press as an Agent of Change: Communication and Cultural Transformations in Early Modern Europe,* 2 vols. (New York: Cambridge University Press, 1979), p. 432.
[48]Ibid., pp. 432-33.
[49]Of course, it is not the existence of literacy in and of itself that leads to "childhood" and "adulthood," but rather the increased possibilities that literacy affords for the *separation of adult and child information systems.* Because situation-separation is the key variable, we can see some evidence of distinctions in childhood and adulthood in various oral cultures where children are kept out of certain locations and discussions—but we do not see the division of childhood into thin year-by-year slices until the spread of literacy and the age-graded school. Conversely, even in literate societies, certain social conditions may override the distinctions in information systems that literacy makes possible. Thus, children were continued to be treated as "little adults" in many early American colonial settlements because harsh and primitive conditions made it difficult to isolate children. Similarly, childhood was "delayed" among the lower classes, not only by the slow spread of literacy, but also by crowded conditions and the lack of adult privacy. Childhood was also muted in many rural areas because children continued to work beside adults many hours a day and because the low density of the population often led to the mixing of ages in a one-room school.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Janice Radway

Interpretive Communities and Variable Literacies: The Functions of Romance Reading

ONE OF THE MOST ENGAGING VOLUMES yet published on the subject of reading is the marvelous collection of photographs by André Kertész titled simply, *On Reading*.[1] Presented without commentary, this series of images of readers absorbed in apparently diverse materials, in both expected and unexpected contexts, is eloquent in its insistence that books and reading serve myriad purposes and functions for a wide variety of individuals. For that reason alone, this simple photographic essay provides an implicit but nonetheless profound commentary on some entrenched and familiar assumptions about literacy.

By grouping together readers as different as the well-dressed man perched on a library ladder in a book-lined study and the ragged young boy sprawled across a pile of discarded newspapers in the street, Kertész is able to suggest that whatever the differences and merits of the materials they peruse, all are engaged in some form of the engrossing behavior through which print is transformed into a world.[2] The very inclusiveness of the series equalizes readers and reading processes that would, in other contexts, be ranked hierarchically on an imaginary literacy scale. On that scale, the grade of

Writing of this paper was supported by a commission from the Annenberg Scholars Program, Annenberg School of Communications, University of Southern California, and delivered at the Scholars Conference, "Creating Meaning: Literacies of Our Time," February 1984. Copyright, Annenberg School of Communications.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"truly literate" would be reserved for those educated individuals who were not only capable of reading texts that the culture deems "literature," but who also regularly choose to read such texts for utilitarian purposes, however broadly conceived. As Raymond Williams has observed, literature and literacy within this sort of system would be inextricably linked with the bourgeois ideology of taste and its concomitant construction of the "literary tradition."[3]

Kertész's book is useful, therefore, precisely because its resolutely democratic presentation of reading refuses to make the usual distinctions through which the truly literate are distinguished from the merely functionally literate or illiterate, and "literature" is segregated from all that is subliterature, paraliterature, or simple entertainment. Although his photographs are all in some sense "about" reading, what they demonstrate is the astonishing variety of circumstances within which reading occurs. Because they function at least partially as signifiers of "context" and difference, the photographs direct our attention to the question of whether such contexts are mere "settings" within which a single unitary process is carried on, or whether they are more significant situations that actively affect the character of that process and thus differentially transform the valence of the act. Kertész's photographs seem to suggest that we must give up our search for the essence and effects of literacy as a single process and look instead at the varied kinds of literate behaviors that people really engage in. The photographs, I would argue, pose the question of *how* each of these unique readers is literate in a particular time and place.

In effect, I am suggesting that Kertész's book echoes John Szwed's call for ethnographic studies of different kinds of literate behavior.[4] Like Kertész, Szwed foregrounds context and argues that in place of the usual theoretical accounts of the unavoidable psychological consequences of acquiring print literacy, we must have more specific studies of what people do with printed texts. I would repeat Szwed's call and suggest, additionally, that such ethnographies can be made more effective investigative tools for the study of literacy if they are grounded upon some recent theoretical arguments in reader-response criticism. Although reader criticism has been developed to explain the interpretation of literary texts, it has implications for the way we think about how people operate upon and use all sorts of printed matter.[5]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The reader and the reading process have come to occupy a central place in literary criticism in recent years, but investigators of these phenomena share no unified theoretical position. Indeed, reception theory or reader-response criticism includes approaches as diverse as the *rezeptionästhetik* of the Constance school, the structuralism of Roland Barthes, the semiotics of Umberto Eco and Jonathan Culler, the "interactionist" work of Louise Rosenblatt and Stanley Fish, and the subjectivist arguments of David Bleich and Norman Holland. Most of these reader theories were developed in response to the textual formalism associated with New Criticism and its caveat against the "affective fallacy." As participants in a widespread conceptual shift in the intellectual community from positivist positions to contextual or interpretive schemas, the various reader theorists sought to challenge the New Critical insistence on the absolute autonomy of the text. Troubled by the complete exclusion of the reader from accounts of the interpretive process, these theorists sought ways to reassert the essential dependency of meaning upon the interaction between the reader and the text.[6]

Yet, despite their preoccupation with the activities of readers, the theorists show a lingering tendency to grant primacy and ultimate power to the text itself. Although willing to acknowledge the reader's contribution to the process of producing a reading of a text, theorists like Roman Ingarden and Wolfgang Iser eventually claim priority for the text because they believe it inevitably directs, governs, controls, indeed, determines the reader's response to it.[7] To name their theories "reception theories" and their method "reader-response criticism" is entirely accurate, since they continue to posit a confrontation between two distinct and quite different entities, the reader and the text. The reader receives the text and responds to it in such a manner that the meaning—what its author desired to communicate and embodied within its textual structures—is, in Iser's words, "concretized" by the reader. Theories like Iser's are variations of the simple transmission-reception model of communication, whereby a sender's message is transmitted to a receiver via the medium of the printed text.

In continuing to accord primacy to texts, the theories remain compatible with the determinism inherent in many traditional conceptions of literacy and, accordingly, in the understanding of reading they imply. Previous theories of literacy have assumed that the char-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

acter of print itself determines what can be done with it, and thus what it means to be literate. These more recent reading theories also argue implicitly that reading is a singular, skilled process, which many readers only partially master and some texts do not fully require. Thus their adherents can continue to accept the division of texts into the complex, or "great," and the simple, or subliterary, as well as the distinction between readers who are fully literate and those who are not. Despite their apparent interest in readers and reading activities, such theories continue to support the notion that all readers are alike and all reading really one, simply because they assume that the technology of print and the character of individual texts together determine the activities they initiate.

There are other reading theories, however, that call for a rethinking of the concept of literacy, precisely because they maintain it is the reader who controls the reading process, not the text. Although these theories are often lumped together with other reader-oriented criticisms as "reception theory" or "response criticism," they should not be so labeled. In fact, such versions of reader theory conceive of reading as "production" or "construction," as opposed to reception or even simple consumption. The individuals who have elaborated these theories do not belong to a single school, nor do they adhere to the same theoretical approach. Yet all hold that reading is a productive activity in which a reader actively *makes* sense of the verbal inscriptions on the page. The most important theorists in this branch of reader theory are Umberto Eco, Stanley Fish, Louise Rosenblatt, and Jonathan Culler.[8] The four vary in the degree to which they employ the jargon now associated with semiotic theory, but each has nonetheless elaborated a model of the text-reader interaction that can be called semiotic.

All, that is, conceive of textual meaning as the product of a complex transaction between an inert textual structure, composed of verbal signifiers, and an actively productive reader, who constructs those signifiers as meaningful signs on the basis of previously learned interpretive procedures and cultural codes. Although the reader often attempts to construe the text by referring to the codes and strategies she believes the author intended her to use, nothing in the text constrains her to do so, nor, if she does, is she necessarily successful. As Eco has observed, "The multiplicity of codes, contexts, and circumstances shows us that the same message can be decoded

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

from different points of view and by reference to diverse systems of conventions."[9] Interpretation and textual meaning, then, are as dependent on who the reader is, on how she understands the process of reading, and on the cultural context within which she operates, as they are on the text's verbal structure itself.

Print is not determinant in such a view, nor is reading a simple mechanical matter of processing what is on the page. Rather, print functions as a kind of material with which and upon which readers operate in order to produce meaning. Reading, then, is a complicated semiotic and fundamentally social process that varies both in place and in time. That is to say, different readers read differently because they belong to what are known as various interpretive communities, each of which acts upon print differently and for different purposes.

The concept of the interpretive community, of course, has been discussed most recently by Stanley Fish.[10] Fish defines the notion rather narrowly, however, because he is interested only in different forms of academic literary criticism. For him, an interpretive community is a loosely connected group of literary scholars who share basic assumptions about the nature of literature, about the goals of literary criticism, and about the nature of the interpretive process. Different interpretive communities, therefore, at least as Fish discusses them, are composed of readers who may disagree about how to construct a literary interpretation, but who are nonetheless equally and similarly literate because all can produce coherent readings of difficult texts.

In spite of Fish's own lack of interest in other than professional readers, his concept of the interpretive community can be fruitfully rethought to apply more generally to readers outside the literary academy to help us understand why some readers prefer Westerns to the classics, detective stories to poetry, or the *Enquirer* to Shakespeare. Interpretive communities may not simply differ over what to do with metaphors and tropes; they may disagree even more fundamentally over the nature and purpose of reading itself. Different interpretive communities may actually be differently literate. We need to know, therefore, what exactly divides the vast community of individuals who buy and read books—in short, how book or print-related behaviors vary according to place and over time.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

To call for such a project, however, is to confront obvious methodological problems almost at once. Because we do not know what an interpretive community actually is, we cannot identify one in order to study the ways in which its members are literate. Are such communities formally constituted groups to which individual members *know* they belong? Or are they much larger collections of people who, by virtue of a common social position and demographic character, unconsciously share certain assumptions about reading as well as preferences for reading material? Assuming that the latter is true, it is not at all obvious how we could ferret out the existence of such a group without first sharpening our understanding of how more formalized interpretive communities operate. If we can detect exactly what it is the readers in a formally recognized group share, and how this common fund of knowledge affects what they "do" with printed texts, we may be able to ask certain questions of apparently unconnected individuals that will also reveal the particular ways in which they behave with printed texts and, therefore, how they are literate.

A logical way to start such a project would be to make use of the publishing industry's own understanding of the book-buying public. The industry recognizes that certain readers are particularly interested in a specific "category" of books, and it therefore identifies mass-produced texts as belonging to one or another, usually by cover iconography. This has proved to be a reliable technique because there is indeed a portion of the book-buying community that reads only one kind of text. Time after time, such "category" readers, as they are known in the trade, will choose books from only this category. Many students of mass-produced literature, furthermore, assume that such readers choose their category because essential features of their social life create needs and demands that are somehow addressed and fulfilled by these books.[11] If this is true, an investigation of their preferences for, and interaction with, books of a particular category may in fact amount to an investigation of the place and function of literacy in their lives.

In this paper, I shall detail my attempt at just such a study, but must point out first that the group I investigated was even more formalized than the loose conglomerate who read a particular category—in this case, the romance.[12] It was necessary to begin with a small group of romance readers, one clustered about a bookstore

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

clerk in "Smithton," because not enough information about this audience is available from publishers to construct a representative sample of romance readers as a whole. Thus my findings about the nature of romance reading are based on a self-selected group of women united by their reliance on a single individual who advises them about "good" and "bad" romances. Since all of the women in the group have been consulting Dorothy Evans, the bookstore clerk, for several years, I was not surprised to learn that as readers they are united by common purposes, preferences, and interpretive procedures. I also found that these aspects of their reading behavior seem to be a function of certain common social factors of their lives, a point I shall return to.

I must add, however, that my interpretive community of romance readers may not extend beyond the area served by this particular bookstore. These women, in fact, may not be part of a larger, genre-based interpretive community. We will know that only when we can test my findings against those of a much larger study, one that attempts to survey the behavior of *all* women who think of themselves as romance readers. While all may read romances, they may do so differently or for different purposes. They may indeed be category readers, but they may not constitute an interpretive community in the sense that they all select, use, and operate on printed texts in certain socially specific ways.

In turning now to the Smithton women and to their characteristic reading behavior, it seems important to describe first exactly how information was elicited about what they "did" with texts. Because I was interested in the women's own self-perceptions and understanding of romances and romance reading, I relied on ethnographic interviewing techniques to map the "world" of the romance reader. I interviewed sixteen women in two groups about all aspects of their leisure activity, and then talked more extensively with five, including Evans. Because I was well aware of the romance reader's wariness about the general public's scorn for her activity, I hoped the group situation would reassure each enough to answer my questions honestly. I was also aware, however, that the group situation might lead to a greater uniformity in response than actually existed, because of the influence of a single reader. I therefore also administered an anonymous questionnaire to the sixteen women as well as to twenty-six others. Since I found little discrepancy between my in-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

formants' oral and written responses and between the responses of the sixteen and others of Evans's customers, I concluded that the material elicited in the oral interviews was a reasonably accurate account of what the women thought they were up to.

My first task was to determine exactly how the members of the group made the necessary discriminations in order to select the texts they wanted. Because they are category readers, what was at issue was their definition of the category or genre and how they identified individual texts as examples of it. I sought such a definition through a variety of related questions to see whether their conscious understanding of the genre coincided with the definition they actually relied on in selecting reading matter.

What I found was that a definition of the genre was implicit in the way they used cover blurbs and illustrations, in their reliance on previous readings of certain authors, and in their use of Evans's recommendations to select their texts. Indeed, all of these activities seemed to be governed by their sense that "romance" had something to do with the manner and tone of presentation of a love relationship. Once I had determined the rudimentary content of the genre, I asked them to provide a "definition" of it to see whether their genre theory actually coincided with how they used individual instances of the category. What they told me was interesting, both because it tended to confirm their implicitly reported requirements and proved to be at once formalist and functional.

Their definition—"a man and a woman meeting, the problems they encounter, whether the relationship will gel or not"—not only identified the fundamental characters and events in the story, but also specified the evolution of the action and, implicitly, the nature of the response (tension or anxiety) it ought to evoke in the reader. By beginning with the definition, I was led to mark off two areas for further study. First, I pursued the issue of the plot structure itself by attempting to determine exactly how the women processed textual inscriptions to arrive at that particular abstract structure. I was trying, essentially, to describe their manner of textual production, to discover what they did with the text to produce their characteristic interpretation. At the same time, I attempted to explore the nature of their reaction to the plot structure, and thus got involved with questions of how the text made them feel and how it functioned in their daily lives. Here, I was investigating the readers' use of the ac-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tivity of reading, asking what they accomplished *by* or *in* the process of reading these books. Before I pursue this aspect of their reading behavior, I would like to return briefly to the interpretive process itself and explore some of the problems encountered in trying to determine how people in real life arrive at a given reading of a particular book, and some of the possibilities as well.

It is somewhat difficult to shed light on the interpretive process simply because so much of it occurs automatically and unconsciously. While most readers can easily summarize a book or recount its plot, we have no sure way of knowing exactly what interpretive operations come into play in the redaction of a 200- or 300-page text. After hearing a plot summary, the investigator might read the text, noting both what the reader has designated as significant in her account and what she has ignored. These observations can then be used to infer the selection criteria that prompted the reader to identify the relevant textual features from which she constructed her final reading.[13] Those selection criteria themselves then point to what the romantic story is "about," at least for the individual summarizing the plot.

In the case of the romance readers, every plot summary ignored the fact that the hero and heroine were contrasted with foil figures with whom they were sometimes entangled. Their refusal to acknowledge these contrasts as essential to the plot suggested that the women's interest in the romance came not from any interest in sexual competition, same sex friendships, or contrasts, but from a deep-seated need to see an ideal relationship worked out between a man and a woman. Their responses to questions about the qualities of good and bad romances seemed to validate this inference. An ideal romance focused on "one woman-one man," while a poor example of the genre often involved the hero and heroine with too many other secondary characters. Their sense that the romance should be "about" a single relationship governed their selective perception of the significant features and events in each tale. This fundamental desire was ultimately responsible for the particular story they constructed.

With the women's essential evaluative criteria thus established, I then questioned them about their understanding or interpretation of the story they had constructed from each text's myriad details and events. Although this led to further observations about how the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

women treated language, particularly declarative statements, it went beyond simple textual operations and their conscious understanding of the story to the covert consequences of those operations and the tacit significance of that understanding. It was surprising to discover that the women saw these tales of "a man and a woman meeting" as stories about a woman's triumph, surprising, because so many feminist literary critics of the genre have argued that romances are about helpless, passive, weak women who relinquish their sense of self in the arms of the more important man.[14] I was tempted to attribute the interpretive difference to varying standards of judgment about female behavior, but certain of the women's statements about the authors' attitudes toward their heroines caused me to think twice about formulating such a conclusion.

Several of the women had observed repeatedly that their favorite writers always wrote about intelligent and independent heroines, so I decided to check this against the texts. If one focused only on verbal assertion, this was indeed the case. The authors always declared at the outset that their heroines were unusual, special, bright, and self-reliant, but later portrayed them as victims of circumstance. Apparently, the Smithton readers do not see this as contradictory because they do not use subsequent narrative action to revise a character portrait established by description at the beginning. Feminist literary critics, of course, applying what Jonathan Culler has described as a rule of unity, *do* try to produce a unified characterization that takes all of these details into account.[15] In their literary universe, character behavior is meant to comment on and alter preliminary portraiture[16]—hence, their final and quite different account of the romantic heroine as only a superficially independent woman, who is, in reality, deeply dependent and incapable of action herself. The argument for the accuracy of their interpretation is that as feminist critics, they are formally trained and thus fully literate. Romance readers, on the other hand, are neither well-educated nor fully conscious of what they do, and therefore simply don't know what the story *really* means. And because these women are somehow incompletely literate, they don't know how to interpret characters correctly. Nonetheless, the romantic text manages to exert its conservative power over them and thus functions to reinforce the patriarchal status quo.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I would like to suggest, however, that there is another equally plausible explanation of this difference in interpretations. The romance reader's failure to unify action and description may, in fact, be a function of a particular "philosophy" of language that effectively precludes such an operation. Their portrait of the heroine, in such a view, is not a result of their ignorance or lack of self-awareness, but a product of a particular attitude toward language. The women believe that words have meanings that are fixed and definite. Because those meanings are essentially contained *in* words, the women also believe that people choose words to say what they mean. Words are always already meaningful and can be selected for what they accurately say about a character or event. The Smithton readers assume that romance authors choose their words very carefully because they intend those words to describe correctly the characters in question. As a result, they do not judge verbal assertion by comparing it with the character's actions. If the writer says that her heroine is intelligent and independent, nothing she does or does not do later can alter her basic character. Consequently, the women believe that they are reading a story about an extraordinary woman who is overcome by unforeseen circumstances, but who nevertheless manages to teach the hero how to care for her and to appreciate her as she wishes to be appreciated. Because he always learns the lesson she has to teach and proposes a permanent commitment, the women can interpret this as the triumph of her values. Their interpretation follows logically from their textual operations, which are themselves dictated by a prior understanding of words and language. It seems to me that what we have here is not a form of partial literacy, but a different form of literacy altogether, founded on its own conception of the word and what can be done with it.

Another consequence of this attitude toward language surfaced again in a discussion about the women's reasons for reading romantic fiction. Although they agreed overwhelmingly that they read principally for enjoyment and to escape their daily problems, the Smithton women also maintained that they read romances to learn—not, as one might expect, about how to conduct a relationship but, rather, because they acquired factual information about geography, culture, and history from these books. This is so because they operate under two assumptions.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

To begin with, they firmly believe that all romance authors research the historical and physical backgrounds of their stories. In fact, this is true. One has only to read the prefaces to romantic fiction to detect how important it is to the author to portray accurately both the physical setting of the story and the period in which it takes place. Indeed, romance writers constantly thank librarians and archivists for their assistance, and for those authors who travel to the foreign locales that form the backgrounds to their stories, there is gratitude to their guides as well.[17] Second, romance readers assume that when an author makes a factual statement about the background, she does so because it is "true." They therefore mark that statement as "information" and commit it to memory as "knowledge." Their *attitude* toward language, then, rather than the text alone, is responsible for one of their most important claims about the worth and function of romance reading. Although the books are works of fiction, the women use them as primers about the world. The romance for them is a kind of encyclopedia, and reading, a process of education.[18]

Romance readers are perhaps not alone in treating novels as compendia about the world. A good deal of popular fiction places important emphasis on setting and background. The readers of Irving Wallace and Arthur Hailey, for instance, believe they authentically experience the worlds of Hollywood, big city hotels, Hawaiian history, and Israeli culture because of the extensive research these authors conduct for their books. Louis L'Amour, perhaps the most popular writer of Westerns, is also well known as a careful student of the history of the American West. If his readers, as well as those of Wallace and Hailey, treat their texts as seriously as do the Smithton romance readers, it may well be that a large portion of the American public has learned its history and geography from the popular book. They must be considered literate despite the fact that they are uninterested in that large body of material sanctioned by the culture as "literature."

But for romance readers, we need to go beyond this level of analysis. Although romances clearly both provide an education and reassure their readers about the triumphant superiority of women and their values, it is likely that when the texts provide the opportunity for the women to realize these benefits through particular kinds of interpretive operations, those operations carry other tacit conse-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

quences and effects that the women are not aware of. This is the most difficult interpretive move in any reader study, since it is not at all clear either what constitutes evidence for an effect or how one validates an intuition that a reader benefits in ways other than those she can attest to explicitly. However, because reading and comprehension are surely not entirely conscious activities, it seems advisable to attempt to infer possible meanings to the reader and the effects of interpretive operations that she carries out but which she may not fully apprehend.

As an example, let me cite something I inferred from my observations about how the Smithton women treated the language of romantic texts. In exploring their methods for formulating character portraits and for processing "factual" material, I noticed that one of the reasons they operate on the texts as they do is a function of the fact that the authors had selected a vocabulary and syntax readily familiar to a middle-class housewife and mother with a year or two of college education. I inferred that this simple and resolutely familiar language use actually permits the women to rely heavily on their memory of previously learned cultural codes. When they encounter such a linguistic structure, they simply supply the most common referents for the words and phrases in question and thus actually construct a fictional duplicate of the world they are familiar with. Although the process of construction appears to the women as automatic and natural comprehension—as learning, in fact—it is actually a form of production that has the ultimate effect of naturalizing and therefore ratifying the world in which the women ordinarily live. Reading is a highly reassurring process, because it prompts them to use their most familiar methods for apprehending the world, and rewards them by enabling them to "find" only what they would have expected. Romance reading, it appears, allows a woman to believe she is learning and changing herself at the very same time it is reassuring her that she already knows how to make sense of an existence which always is as she expects, even in fiction.

Assessing the ultimate impact of these contradictory effects of the romance reader's interpretive activity is as difficult a task as trying to validate the fact that the covert consequences one detects or infers are actually experienced by the reader. One might argue that in learning more and more about her world, the romance reader comes to value herself and her abilities more, and thus feels powerful

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

enough to seek change. Yet it is equally possible that the conservative nature of the interpretive process actually reassures her that nothing need be changed at all, precisely because the world *is* readable and hence fully meaningful. Corroboration of either effect can be sought in the reader's daily activities, but even then it would be virtually impossible to state positively that the interpretive activities performed in reading romantic novels resulted in changed behavior.

This is the point at which the analyst of reading becomes aware of the limits of the ethnographic method, an awareness that is quite like the anthropologist's recognition of how difficult it is to pierce the veil of cultural behavior to fathom its meaning and its fundamental roots in ideology. Even though reading can be investigated empirically, and the readers' own interpretations of texts taken into account, analytic interpretation cannot be done away with entirely. As Clifford Geertz reminded ethnographic anthropologists, "What we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to. Cultural analysis," he concludes, "is . . . guessing at meanings, assessing the guesses, and drawing explanatory conclusions from the better guesses."[19] My account of what romance readers do to a text in the process of constructing an interpretation is just such a guess; but I think it is a better guess than it would have been if I had merely inferred the existence of such behavior on the basis of my own reading of the texts, a reading that none of the Smithton readers would have recognized as an interpretation of the books she knows so well.

Not only, however, do the Smithton women have an elaborate theory about the meaning and the significance of the romance as a literary form, but they can articulate to themselves a coherent explanation of the meaning of the act of reading itself as well. It is true, of course, that all acts of reading involve particular texts, and thus the overall significance of each complex act is intimately bound up with the meaning of the text and its implication in the reader's social and ideological life. Still, because the act of picking up a book is a form of social behavior that permits the reader to suspend momentarily all connections with the outside world, I think it is essential to make a distinction between book reading itself and the text constructed as a consequence of it.[20] Beyond knowing what the romantic story means to the Smithton reader, one wants to know also how she uses the activity of burying herself in the pages of a book. To

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ask this question is, in effect, to ask what she understands herself to be doing in reading, as well as to ask what she believes she conveys to others by reading.

The importance of these questions was made clear to me by the women themselves. Early in my initial interview with Evans, for example, I asked her what romantic novels "do" better than other novels available today. In posing the question, I expected her to concern herself with plots and ideas, that is, with the meaning and value of the romantic story. But she misconstrued my use of "do" and thought I had asked about the effects the reading of such novels has upon the reader. She talked at great length about the benefits these books provide the traditional wife and mother. The typical woman, she said, has many, many caretaking duties that are part of those intertwined roles, but her labors are inadequately appreciated by her family. Because individual family members do not sufficiently recognize her efforts nor compensate her for them by "taking care" of her, Evans believes such a woman must find a legitimate way of releasing her from her duties temporarily and of replenishing the energy that is constantly being drained in performing them. Romance reading, she explained, is the perfect solution. I think it would be worthwhile to quote Evans herself here, precisely because her remarks indicate so tellingly how conscious she is of reading as an activity that is an integral part of the readers' daily existence.

> As a mother, I have run 'em to the orthodontist. I have run 'em to the swimming pool. I have run 'em to baton twirling lessons. I have run up to school because they forgot their lunch. You know, I mean, really! And you do it. And it isn't that you begrudge it. That isn't it. Then my husband would walk in the door and he'd say, "Well, what did you do today?" You know, it was like, "Well, tell me how you spent the last eight hours, because I've been out working." And I finally got to the point where I would say, "Well, I read four books, and I did all the wash and got the meal on the table and the beds are all made, and the house is tidy." And I would get defensive like, "So what do you call all this? Why should I have to tell you because I certainly don't ask you what you did for eight hours, step by step."—But their husbands *do* do that. We've compared notes. They hit the house and it's like "Well all right, I've been out earning a living. Now what have you been doin' with your time?" And you begin to be feeling, "Now really, why is he questioning me?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Evans maintains, in effect, that romance reading is a "declaration of independence" for her and her customers. She believes that in picking up a book, each is effectively erecting a barrier between herself and the arena of her regular family ministrations. Because husband and children are told, "This is my time, my space, now leave me alone," they are expected to respect the signal of the book and to avoid interrupting her. Book reading allows the woman to free herself from her duties and responsibilities and provides a "space" or "time" within which she can attend to her own interests and needs.

It is here that the demographic character of this particular group of readers is relevant. For the most part, the Smithton women are married, middle-class mothers of children other than infants. More than 60 percent were between twenty-five and forty-four at the time of the study, and 70 percent had children younger than eighteen. Although 42 percent work outside the home, they nevertheless felt that family care was primarily their responsibility. In discussion after discussion, they referred to the unrelenting family demands made upon them and to the "tensions" these produced. Then, with a combination of defensiveness and belligerence, the women asserted repeatedly that the very difficulty of their double work burden earned them the right to do something pleasurable for themselves alone.

In assessing the correlation between the social character of the lives of these women and their understanding of the value of romance reading, it seems clear that what the women are doing is allowing themselves to abandon temporarily the self-abnegation that had been engrained in them all their lives as the proper attitude for a wife and mother. Within the context of their lives, romance reading appeared to be both an assertion of a deeply felt psychological need and a means for satisfying that need. Although the women themselves accept their need for respite and replenishment and for self-involvement as part of a role they willingly adopt, that they feel their romance reading is not simply pleasurable but necessary testifies to the enduring force of that need. Several of the women equated their reading to a form of addiction, and most were quite comfortable with a view of themselves as dependent on romances. Something specific and integral to their situation as wives and mothers apparently is the ultimate source of the romance's signifi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cance to them and, consequently, of their preference for the category.

It was at this point that I moved beyond the women's own construction of their behavior to look for a structural explanation of the social facts of their existence that led not only to the behavior itself but to their construction of it as well. Here, I was helped by recent work on the nature of patriarchy and middle-class marriage.[21] Within the context of such work, it seemed clear that the Smithton readers' need for respite and replenishment was a function of the fact that within traditional patriarchal marriage, no one is charged with the affective and emotional reconstitution of women.[22] Indeed, as one of Evans's customers put it, "You always have to be a Mary Poppins. You can't be sad, you can't be mad, you have to keep everything bottled up inside." Even if a woman is depleted by her efforts to care for others, she is nonetheless expected to restore and sustain herself within such a family structure, precisely because other family members do not conceive of their role as being one of nurturance. The women turn to romance reading because the activity itself temporarily permits them to identify with a heroine who receives all the attention and care of an extraordinary man. In effect, when they buy a romance, they are purchasing personal space and vicarious attention.

Before exploring exactly how the stories supply the longed-for reassurance and nurturance, we might take note of the fact that the Smithton readers feel a bit guilty about the time and money spent on indulging themselves in this way. Given their willing acceptance of the traditional female role with its implicit self-denial and self-abnegation, this is quite understandable. Although the women defiantly assert that they, too, have a right to some time for themselves (they often point to the amount of time their husbands spend watching televised sports), they worry about their families' disapproval of their book expenses and their self-preoccupation. Indeed, many of the women asked somewhat rhetorically whether I agreed that they had a right to do something for themselves alone, even though as a wife and mother they were supposed to be concerned with the interests of others. Their defensiveness and uncertainty suggests that their chronic reading causes them to experience a certain amount of role conflict. They feel a need to replenish the self and to attend to emotional needs created by the role they

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

have willingly accepted, yet are not sure that this should be done at the expense of family responsibilities or through an activity that is so obviously pleasurable.

It is here that the other "use" of romance reading becomes important, because it acts to justify the time and money spent on books and reading. The Smithton women read primarily "to escape"—literally, to deny their presence in the family context. But they also read to learn. They enjoy the travelog and documentary aspects of the romance immensely, and even categorize books on the basis of their historical and geographic settings. More important, however, they actively use the factual materials they learn through reading to demonstrate to their skeptical families that they have indeed acquired something valuable in exchange for their expenditure of time and money. This strategy cannily defines the *act* of romance reading as goal-directed work, and therefore assigns to it a higher value in the male world, which is preoccupied with labor, self-improvement, and achievement.

Although the women are well aware of the fact that they use this aspect of romance reading to convince their husbands of the activity's validity, they are unaware of the benefits they derive by construing the activity in this way. Again, I am making an interpretive leap here, but it seems to be justified, given all the women have said about the confining aspects of domestic work and our culture's propensity to disparage women. By storing factual material as "information," and by displaying it to others as their own "knowledge," the women convince themselves that they have not languished as "mere housewives" but have continued to better themselves and to demonstrate their fundamental abilities. Thus, at the same time that romance reading gives them much needed personal time and space, it also enables them to believe that they are capable individuals and that they are changing for the better. Both "uses" of romance reading, therefore, act to deny the immediate present and to propel the women elsewhere. The act of romance reading first walls off pressing demands and then demonstrates to the participants that they are making themselves better or "other" than they were.

I think it can be seen from this example why it is so helpful to distinguish between the book read by an individual and the act of reading itself carried on within a specific social context. Although it is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

true that the two are not actually distinct components of the individual's behavior—simply because the act of reading must involve a text, which cannot help but contribute to the meaning of the larger activity—by separating them analytically, one can then isolate the social and material situation surrounding the actual event of reading. Books are always read within a set of specific circumstances, and their final meaning and impact may well be a function of the way those circumstances constitute the reader as a social being. In thus developing an account of how the act of book reading fits within the complex set of relations and behaviors that characterize the reader's social world, we can understand better why she might select such specific reading material in the first place. An important correlation may exist, in fact, between the needs that prompt the decision to read and the character of the books that are chosen for that activity. By taking account of that possibility, one is better prepared, finally, to return to the issue of textual interpretation in an effort to understand how the reader's particular construction of a text provides certain forms of intellectual and emotional gratification. Having sketched out how a reader actually uses her literacy, one is then prepared to investigate why she does so on these particular texts.

I can best demonstrate how intricate the connections can be between the social context surrounding a reader's activity and the texts that an individual chooses to read by referring one last time to Dorothy Evans and the Smithton women. Although I cannot detail all the ways in which the texts they selected addressed the specific needs and concerns that originated with their social role and their situation in the family context, I can at least show that by reading romances, their reading activity was made even more meaningful and beneficial to them. I discovered the special significance of the romance to them when I asked whether all romances were the same. Of course they weren't, the women replied, and then showed me that they could clearly distinguish the good romances from the bad. I then began to probe more deeply into their evaluative procedures and to examine more carefully the differences between the books they actually read and those they rejected.

Their favorite books were indeed characterized by the "one woman/one man" plot they claimed to prefer, stories in which the romantic hero focused all of his attention on a heroine with whom

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

they identified. Although the initial interaction between the pair was characterized by the usual misunderstandings and emotional distance, the hero's treatment of the heroine was decidedly less cruel and violent than it was in what they considered to be poorer versions of the genre. In fact, his mistreatment of the heroine was always mitigated by temporary softenings of his demeanor, and his ultimate attitude toward her was transformed much earlier in the tale. Ideal heroes, it seemed, were also a good deal more androgynous than their less satisfying counterparts in that they combined masculine strength and power with a more feminine sensitivity and tenderness.

In indulging themselves in a few hundred pages of the hero's response to the heroine, the Smithton women allowed themselves to exist vicariously as the center of a spectacular man's attention. Not only did their reading activity permit them to give up their actively nurturant or servicing role in the family, but it also, because of the nature of the text, enabled them to become the passive recipient of another's total and tender care. What they achieved through romance reading was twofold: a temporary release from the demands of the social role that defined them, and psychological gratification for the needs they experienced because they had adopted that role. It might be said that romance reading functioned for the women as a kind of tacit, minimal protest against the patriarchal constitution of women: it enabled them to mark off a space where they could temporarily deny the selflessness usually demanded of them, to acknowledge the validity of the desires and needs created by the demeanor they otherwise accepted as part of that constitution, and to meet those needs by acquiring vicariously the nurturance and care that was lacking in their daily lives.

Before characterizing romance reading as incipiently subversive or oppositional behavior, however, we would do well to look carefully at the second way in which the reading of romances specifically addressed the Smithton readers' social situation as women. This aspect of romance reading was revealed to me through my exploration of their assertion that the stories were those of a woman's triumph. In looking at their favorite books very carefully, in fact, I could see a way in which their assertion was true. The typical ideal romance establishes at the outset that there is a clear opposition between the male and female worlds, the former dominated by competition, the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

desire for wealth, and the quest for social position, the latter characterized by the value placed on love and intimate human interactions. The romantic heroine, of course, as an inhabitant of the female world, understands the value of love, while the hero does not. Preoccupied with the goals of the typical male quest, he has no time in the beginning for sensitivity and tender gestures. In the course of the story, however, he learns the value of such things because he almost loses the heroine. In a sense, he is converted by the heroine into an occupant and proponent of the female world of love and emotional commitment—hence, the Smithton readers' understanding of these stories as tales of a woman's victory.

Romance reading, then, also demonstrates to these women that the domestic world they occupy is eminently valuable. They are told, in fact, that it is the way to true happiness, just as they are shown that it has the evangelical power to convert doubters to its purpose. The romance thus assures its readers that the world they have chosen already, or will likely choose in the future, is the world they ought to occupy. We might logically conclude, therefore, that one consequence of romance reading might be a reinforcement of the patriarchal constitution of women. Despite the fact that it enables women to resist some of that constitution's most difficult demands, romance reading might ultimately conserve patriarchy, because it reassures women that the sphere they occupy is right and fulfilling, and that all of their needs can be met within it. If so, this aspect of romance reading would contradict its existence as incipient opposition, and might override any positive force it could exert upon women to develop more effective ways of coping with their needs for nurturance and attentive care.

Unfortunately, assessment of the relative power of these two aspects of this highly complex form of behavior is nearly impossible without long-range, extensive observation of the women's actual behavior in the family. And should such a study be undertaken, it would still be extremely difficult to isolate and identify the causes of specific behavioral changes. Greater assertiveness on the part of the women might have nothing to do with the positive effects of romance reading, but might be the result of changes in the culture at large. In addition, continued acceptance of the traditional female role might in fact be the result of persistent economic dependence rather than the conservative impact of romance reading. Here again,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

we run up against the limitations of the ethnographic method. Although we can ask our informants what they believe they are accomplishing in reading—just as we can ask them to explain how they affect others *by* reading—we must get beyond their conscious comprehension and self-understanding if we are to make some sort of judgment about the cumulative impact of that activity both on them and on others. To ask about such an effect is, in fact, to pose a question about the relationship between the imaginary realm and the realm of material behavior in the world of actual social relations. The answer to this question can only be found through careful observation of just those behavioral changes over time. However, even when ethnographic observation leads to conclusions about significant alterations in women's behavior, attribution of those changes to specific causes will remain an inherently interpretive procedure, because the link between imagination and action will always be an inferred one.

Because I could not observe the behavior of the Smithton women over a long period of time, my account of their reading activity ends with an explanation of the multiple meanings that the activity has within the context of their daily lives. That explanation locates the ultimate source of the group's existence as an interpretive community in their roles as wives and mothers. Their preference for the romance genre, in my view, is a function of their particular social situation. The nature of their literacy, therefore—which is to say, the way they choose, understand, and use their books—is deeply affected by the circumstances of their lives. These, in fact, are both the very source of their desire to read and the set of conditions that determine and give meaning to the particular way in which they do.

The ultimate test of such an argument, of course, would be a series of related studies of romance readers that would begin by defining differently the interpretive communities to be investigated. One such study would have to begin with a group of unrelated romance readers who were demographically similar to the Smithton women. If these readers also read romances to escape and to learn, and chose only those books that supplied vicarious nurturance, then I think we might reasonably conclude that at least one form of romance reading is a function of the social and psychological consequences of patriarchal marriage. If a more extensive study of a demographically varied group of romance readers demonstrated that

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

young, unmarried women, say, read different romances for different reasons, this would not necessarily upset that initial correlation. It is entirely possible, I think, that the interpretive community of romance readers, defined only by its members' preference for the romance category, may be subdivided into more specialized groups, whose reading behaviors vary with the particular circumstances of their daily lives. Although the interest of romance readers in the genre may be a function of the fact that all are women in a patriarchal society, and thus all fantasize about achieving self-definition through attachment to a spectacular man, the character of the man, the nature of the attachment, and the process of self-realization that are longed for may be determined by the particular situation of these women in patriarchal culture. All components of literate behavior, in short, including the desire to read, the decision to read a certain kind of material, the interpretation of that material, and the uses to which both the interpretation and the act of constructing it are put, may well be a consequence of the diverse material and social features that characterize the lives of real individuals. There may be, in fact, as many different forms of literate behavior as there are interpretive communities who buy and use books.

ENDNOTES

I would like to thank Horace Newcomb for his very helpful comments and suggestions on an earlier version of this paper.

[1]André Kertész, *On Reading* (New York: Penguin Books, 1982).

[2]Ibid., pp. 37, 10.

[3]Raymond Williams, *Marxism and Literature* (Oxford: Oxford University Press, 1977), pp. 45-54.

[4]John Szwed, "The Ethnography of Literacy," in *Writing: The Nature, Development, and Teaching of Written Communication*, vol. 1. *Variation in Writing: Functional and Linguistic Cultural Differences*, edited by Marcia Farr Whiteman (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1981). I am grateful to Judy Levin for bringing this article to my attention in one of our many helpful conversations about literacy and romance reading.

[5]For a good introduction to reader-response criticism, see Jane P. Tompkins, *Reader-Response Criticism: From Formalism to Post-Structuralism* (Baltimore: Johns Hopkins University Press, 1980), and Susan B. Suleiman and Inge Crosman, *The Reader in the Text: Essays on Audience and Interpretation* (Princeton: Princeton University Press, 1980).

[6]For historical and critical discussion of reader theory, see Jonathan Culler, *The Pursuit of Signs: Semiotics, Literature, Deconstruction* (Ithaca, N.Y.: Cornell University Press, 1981), pp. 47-131, and *On Deconstruction: Theory and Criti-*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cism after Structuralism (Ithaca, N.Y.: Cornell University Press, 1982), pp. 31-83. See also Terry Eagleton, *Literary Theory: An Introduction* (Minneapolis: University of Minnesota Press, 1983), pp. 54-90.

[7]See Roman Ingarden, *The Literary Work of Art: An Investigation on the Borderlines of Ontology, Logic, and Theory of Literature,* translated by George Grabowicz (Evanston, Ill.: Northwestern University Press, 1973), and Wolfgang Iser, *The Act of Reading: A Theory of Aesthetic Response* (Baltimore: Johns Hopkins University Press, 1978).

[8]See, especially, Umberto Eco, *The Role of the Reader: Explorations in the Semiotics of Texts* (Bloomington: Indiana University Press, 1979) and *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976); Jonathan Culler, *Structuralist Poetics: Structuralism, Linguistics, and the Study of Literature* (Ithaca, N.Y.: Cornell University Press, 1975); Stanley Fish, *Is There a Text in This Class?: The Authority of Interpretive Communities* (Cambridge: Harvard University Press, 1980); Louise Rosenblatt, *The Reader, the Text, the Poem: The Transactional Theory of the Literary Work* (Carbondale: Southern Illinois University Press, 1978).

[9]Eco, *A Theory of Semiotics,* p. 139.

[10]See especially part 2 of *Is There a Text in This Class?,* pp. 303-71.

[11]See, for example, John Cawelti, *Adventure, Mystery, and Romance: Formula Stories as Art and Popular Culture* (Chicago: University of Chicago Press, 1976).

[12]The present discussion of romance reading is based on my full-length study, *Reading the Romance: Women, Patriarchy, and Popular Literature* (Chapel Hill: University of North Carolina Press, forthcoming.) For another summary of my findings, see "Women Read the Romance: The Interaction of Text and Context," *Feminist Studies* 9 (Spring 1983): 53-78. The names Dorothy Evans and the Smithton women are pseudonyms designed to protect the privacy of my informants.

[13]As Stanley Fish has argued, "Linguistic and textual facts, rather than being the objects of interpretation, are its products" (*Is There a Text in This Class?* p. 9). Accordingly, the literary features used by the Smithton readers as the internal skeleton of their readings are actually isolated and deemed significant by them precisely because they come to the texts with a prior conception of what the stories should and usually do mean.

[14]See Ann Douglas, "Soft Porn Culture," *The New Republic,* August 30, 1980, pp. 25-29; Tania Modleski, "The Disappearing Act: A Study of Harlequin Romances," *Signs* 5 (Spring 1980): 435-48; Ann Barr Snitow, "Mass Market Romance: Pornography for Women Is Different," *Radical History Review* 20 (Spring/Summer 1979): 141-61.

[15]Culler, *Structuralist Poetics,* pp. 230-38, See also his *Ferdinand de Saussure* (New York: Penguin Books, 1976), pp. 117-18.

[16]For a demonstration of how such a reading strategy works, see William Veeder's discussion of *Portrait of a Lady,* in *Henry James—The Lessons of the Master: Popular Fiction and Personal Style in the Nineteenth Century* (Chicago: University of Chicago Press, 1975), pp. 106-83.

[17]In her acknowledgments to *The Proud Breed* (New York: Fawcett Crest Books, 1978), p. 7, for instance, Celeste De Blasis thanks the San Bernardino County library system as well as the Bancroft Library at Berkeley. She continues, "The Roman Catholic pastors of St. Joan of Arc, Victorville, St. David's, Apple Valley, Christ the Good Shepherd, Adelanto, and San Juan Capistrano Mission, and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a noted historian of the Archdiocese of Los Angeles were generous with their knowledge of early California's church ritual."

[18]In an essay on Ian Fleming's thrillers ("Narrative Structures in Fleming," in *The Role of the Reader*, pp. 144-72), Umberto Eco has argued that Fleming also indulges in minute description of familiar objects that appear in the background to the melodramatic action. Eco calls this strategy "the technique of the aimless glance" and maintains that it functions to seduce the reader into identifying with a character who thus appears to be "real" even though his activities are otherwise preposterous. Because Fleming rarely describes the unusual, Eco concludes, those descriptions do not occur as "encyclopedic information." Although the description in romances appears somewhat similar to that found in Fleming, it differs precisely because it focuses on the historically and spatially distant and thus can function encyclopedically.

[19]Clifford Geertz, "Thick Description: Toward an Interpretive Theory of Culture," in *The Interpretation of Cultures* (New York: Basic Books, 1973), pp. 9, 20.

[20]See Robert Escarpit's discussion of reading in *The Sociology of Literature*, translated by Ernest Pick (Painesville, Ohio: Lake Erie College Press, 1965), p. 88.

[21]See, for example, Kate Millett, *Sexual Politics* (Garden City, N.Y.: Doubleday, 1970), pp. 23-58; Heidi Hartmann, "The Unhappy Marriage of Marxism and Feminism: Towards a More Progressive Union," *Capital and Class* 8 (Summer 1979), pp. 1-33 and "The Family as Locus of Gender, Class, and Political Struggle: The Example of Housework," *Signs* 6 (Spring, 1981), pp. 366-94; Annette Kuhn, "Structures of Patriarchy and Capitalism in the Family," in *Feminism and Materialism: Women and Modes of Production*, edited by Annette Kuhn and AnnMarie Wolpe, (London: Routledge & Kegan Paul, 1978), pp. 42-67; and Roisin McDonough and Rachel Harrison, "Patriarchy and Relations of Production," in *Feminism and Materialism*, pp. 11-41.

[22]See Nancy Chodorow, *The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender* (Berkeley: University of California Press, 1978).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Carol Gilligan

The Conquistador and the Dark Continent: Reflections on the Psychology of Love

I BEGIN THIS ESSAY ON LOVE with a question about *Othello:* How do we hear the lines at the end of the play, when Othello speaks of himself as "one that loved not wisely but too well"? In this tragedy built upon stories, how do we hear this story of love? The sadness of the speech dispels an ironic reading of its text, and earlier in the scene it is clear that Othello is trying to reveal himself. Casting aside his heroic stories—"Why should honour outlive honesty? / Let it go all"—he announces his wish to be seen; "Uncle," he says, "I must come forth." "Look in upon me," he tells Gratiano; "Behold," he says, presenting himself. "Here I am," he says to Lodovico, attaching the word honorable to murderer and renouncing as vain his former boasts. Thus, when he asks these Venetian envoys, as they prepare to make known his fault to the state, to "speak of me as I am: nothing extenuate," we are inclined to believe the story he says they must tell. Yet, listening to his story of excessive love and looking at Desdemona dead on the stage, we wonder—if he loved her, why did he kill her? Why didn't he know who she was?

The conquistador of my title, however, is Freud, the self-proclaimed conqueror of an inner world: the dark continent, also his phrase, refers to women's experience of sexuality and relationships. If the tragedy of Othello raises the question of how we can talk about love without knowing about women, or conversely, if we know about women, what stories have darkened our reason, obscur-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing the truth, the work of Freud not only reveals a psychology of love that excludes the experience of women, but also clarifies the problems posed by including women in the psychology of love. The Freud I portray in this essay is not the Victorian patriarch who has been well described, but Freud the observer, the writer of letters, the scientist who in recording his observations uncovered a problem in psychology that only recently has been explored.

The theme of conquest, in love and in science, implies the overcoming of nature. But the image of a dark continent, marking the presence of mystery and danger, also suggests the shadow that is cast by the figure of the conqueror. "She loved me for the dangers I had passed, / And I loved her that she did pity them," Othello explains in the opening scenes of the play, relating a love that leaves her story untold. The failure to see that this story is missing creates the vulnerability to its misapprehension and raises the question of what he means by love. In a play that is reiteratively about honesty, Desdemona dies telling a lie—to protect Othello but also to convey the truth of her love within a framework that has rendered its direct expression untenable.

In the Vienna in which Freud wrote, the constraints on women were similarly apparent, manifest in the indirect discourse that led to the initiation of psychoanalytic treatment. But as the elaboration of one set of meanings led another to become progressively hidden, women's stories about love became increasingly dark and inaccessible. Thus a story is lost and with it the tension between two forms of attachment—one that connects love with wisdom, one that separates feelings from judgment.

My interest in conflicting stories about love grew out of my research on moral development—how people come to construe experience in moral terms, and how moral language in turn shapes and is changed by experiences of conflict and choice. In listening to this language as it appeared in people's discussions of conflicts and choices they faced, I heard a way of talking about morality that did not fit the categories described in psychological or philosophical texts. This different voice emerged most clearly in women who, when talking about morality, often spoke not about matters of justice—the fair weighing and balancing of claims—but about care and response, problems of responsibility in relationships. This way of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

talking about morality had repeatedly set women apart: at best they were seen as merciful and selfless; at worst, as lacking in judgment and thought. Piaget had said that "apart from our relations with other people, there can be no moral necessity"; but he then equated moral development with the evolution of the legal sense, noting that girls in their games did not share boys' fascination with the elaboration of rules.[1] Iris Murdoch observed that philosophers seemed to have "forgotten or 'theorized away' " the facts that an unexamined life can be virtuous and that love is a central concept in morals.[2] Although the same elision appears in the psychology literature as well, women, it seemed, in talking about morality were in fact talking about love.

"What makes something a moral problem for you?" A fourteen-year-old girl replies: "Probably like having a fight over something that's not worth fighting about. Like getting into a fight with your parents over something that's not really worth doing . . . and then, you know, you just get farther apart." "Hurting others," another teenager says, "doing something that takes away from other people . . . that is what makes it a moral problem for me." "It is something in the context of people living together," a women who is a physician reflects, "and of necessity being interdependent on each other and having to share with each other and hence having to care about each other."

Once heard, this voice could readily be identified in people's discussions of moral dilemmas as the themes of connection, not hurting, care, and response differentiated it from the voice that spoke of equality, reciprocity, justice, and rights. The discovery that these different modes of moral discourse appeared in conjunction with different ways of describing the self—as separate in relation to others and as interdependent—revealed the common grounding of these distinctions in two different perspectives toward relationships. These two perspectives, which were clarified through the work of Nona Lyons, are the perspectives of *reciprocity* and *response*—one rooted in impartiality and objectivity, the capacity to distance oneself and determine fair rules for mediating relationships; one grounded in the specific context of others, the ability to perceive people in their own terms and to respond to their needs.[3]

For centuries these two lines of morality have wandered through the Western tradition, appearing in the contrasts between reason and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

compassion, fairness and forgiveness, justice and mercy—and emerging repeatedly, although by no means exclusively, in contrasts between women and men. These distinctions implied an underlying division between thought and feeling, a separation between the process of judgment and the capacity for response. But the association with gender focused the problem in this formulation, since the implication that women were thoughtless and men without feeling clearly could not be sustained. Instead, there appeared to be two modes of thinking that carried different implications of feeling and signified different ways of perceiving others and knowing oneself.

"What does responsibility mean to you?" A thirty-five-year-old man replies: "I think I, as an individual, am responsible for myself, and having responsibility for myself involves being responsible for people to whom I have a commitment. But as far as being responsible for everybody, I don't think so. I think what happens to people happens to them, and you cannot be responsible for everybody." While this response confirms the prevailing definition of self in terms of individuality and separation, as well as the common understanding of responsibility in terms of personal commitment and contractual obligation, a different understanding of both self and morality emerge in a forty-year-old woman's reply: "Responsibility means that you care about the other person, that you are sensitive to the other person's needs and you consider them as part of your needs because you are dependent on each other, and you live and work, you give and take with people in society, it requires an interplay, an interchange. In order to live in society, it requires that everyone gives and takes, and that's what I mean by responsibility, the willingness to give and take." In this way, attention to women's thinking broadened the definition of self and the categories of moral thought, and this expanded conceptual framework provided a new way of listening to differences not only between, but also within, the thinking of women and men.

The discovery that love, in the sense of care and concern for the well-being of others in their own terms—a love arising from an awareness of connection and tied to the capacity for response—appears regularly in people's thinking about moral conflict and choice, raises a series of questions that extends the inquiry on morality into the psychology of love. Such an extension has been advocated in philosophy by Lawrence Blum, who challenges the dominant Kantian

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

position by arguing that altruistic concerns and sympathetic emotions can be considered morally good,[4] as well as in psychology, by Martin Hoffman, who, in turning to the study of empathy and altruism, points out that "Western psychology has evolved along lines seemingly antithetical to giving consideration for others a central place in the overall view of personality." Hoffman criticizes "the doctrinaire view . . . that altruistic behavior can always be explained in terms of instrumental, self-serving motives in the actor"—the view, in short, that people are selfish, and altruism always a guise.[5] But the current inquiry, which is sympathetic to these efforts and indebted to their clarification, begins with the awareness of two different perspectives toward relationships and asks whether the distinction between egoism and altruism, as well as the sharp division between rationality and emotion, which have informed the discussion not only of morality but also of love in the Western world, are not themselves embedded in a particular perspective toward relationships, one premised on a fundamental separation between other and self.

Since women repeatedly are observed in the literature on psychoanalysis and personality psychology to blur the distinction between self and others, just as in the literature on morality they are observed to let feelings influence thought, it is through the experience of women that I enter the psychology of love. The existence of two perspectives that inform two ways of speaking about relationships immediately calls attention to the potential for misunderstanding, not only in everyday life but also in schemes of interpretation—the possibility of a systematic mistranslation in the shift from one to the other mode. While the characterization of women as lacking an awareness of boundaries implies a failure of differentiation, the acuity of women's perceptions of others challenges this interpretation and suggests a different experience of self that gives rise to a different story of love.

The way in which one story about love obscures another is the subject I wish first to address by unraveling the mystery of how Freud, who began with the exploration of women's experience, arrived at a theory that shadowed that experience, rendering the psychology of women opaque. By traversing again the familiar terrain of the *Studies on Hysteria* and the Dora case, I will chart the progress of an eclipse that follows the exposition of theory, begin-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ning with the *Three Essays on Sexuality* that Freud published in 1905, extending with the paper "On Narcissism" in 1914, and reaching completion in the 1920s, when the image of the dark continent appears. The question then arises as to why this shadowing of women was not seen by Freud to impose a qualification on his theories of sexuality and love.

When Joseph Breuer, drawn by the suffering of his now-famous patient, Anna O., began to attend to the words she muttered during her daily periods of *"absence,"* he noticed that if he repeated her phrases to her while she was complaining about the "tormenting," she "at once joined in and began to paint some situation or tell some story, hesitatingly at first and in her paraphrasic jargon, but the longer she went on the more fluent she became, till at last she was speaking quite correct German." This observation was striking because at this time in her illness Anna O. was otherwise "almost completely deprived of words," becoming for two weeks completely dumb and "in spite of making great and continuous efforts to speak, she was unable to say a syllable." Breuer, through his "benevolent scrutiny" of this "markedly intelligent girl with great poetic and imaginative gifts" as well as "a keen sensitivity to the sufferings of others," suspected that she "had felt very much offended over something and had determined not to speak about it." Proceeding on this supposition, he obliged her to talk about the inhibition and discovered that when she did so, it disappeared.[6]

For a while, Anna O. spoke only in English—a language Breuer could understand—and the stories she told in the course of what she named her "talking cure" were "always sad and some of them very charming; as a rule their starting point or central situation was of a girl anxiously sitting by a sickbed." Anna's symptoms—disturbances first of voice, then of vision, then of the movement of various limbs—had appeared during her father's illness, and at the time of his death they intensified, and her stories became "still more tragic," deteriorating ultimately into "frightful and terrifying hallucinations."[7]

Hysteria had been thought for centuries to be caused by a wandering womb, but when Breuer began to follow the wandering words of his hysterical patient, he found that the symptoms were connected to a story that was being concealed, not only from others

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but also from the patient herself. Using hypnosis as an adjunct to Anna's self-induced periods of trance, he found that once her symptoms were reattached to their stories—a laborious process that proceeded detail by detail—the various disturbances of movement, vision, and speech disappeared and his patient experienced relief. Describing this cathartic method to Freud, who wondered about it for the next five years, Breuer fled from his attachment to Anna and left Freud to puzzle over the stories and the process of their dissociation.

In his essay "The Psychotherapy of Hysteria," published in 1895, Freud, never adept at hypnosis, reports the substitution of his own technique of using the pressure of his hand on the patient's forehead to release the familiar though forgotten thoughts. Enumerating a "few instances of the excellent results brought about by this technical procedure," Freud reports the case of a girl who was suffering, like so many others, from an intolerable *tussis nervosa,* which had dragged on for six years following its onset when she was fourteen. Recalling under pressure the death of a dog she had loved, she arrived by association first at the thought, "Now I am quite alone in the world. No one here loves me," and then at the memory that her cough had returned along with a similar thought following the death of her uncle who, in Freud's description, "seems to have been the only member of the family who had shown any feeling for her, who had loved her." Freud identifies the pathogenic idea as the thought that nobody loved her together with its companion thought that she did not deserve to be loved. But he concludes this illustration of the success of his method by noting that "there was something attaching to the idea of 'love' which there was a strong resistance to her telling me." However, he ends, "the analysis broke off before this was cleared up."[8]

The sense of something attaching to the idea of love that was eluding Freud's observation and provoking strong resistance in his female patients, leading them to break off analysis in midstream, returns as a theme in the Dora case, recurring underneath Freud's jubilant report of the success of his method of analyzing dreams and the confirmation of his theory of infantile sexuality. Now the outlines of the story underlying the symptoms of hysteria were clear as Freud specified the psychical determinants of the disease—a psychical trauma, a conflict of affects, and a disturbance in the sphere of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sexuality. Dreams, the royal road to the unconscious, revealed these connections with startling clarity, enabling him to establish the intimate connection he sought between the story of the patient's sufferings and the symptoms of the disease. But between his *Studies on Hysteria* and Dora's analysis, which took place in the last months of 1900, Freud's own self-analysis had intervened, providing him with a different story that he proceeded to impose on Dora's case.

Dora came to Freud for analysis at the age of eighteen, brought by her father and suffering from severe attacks of nervous coughing which had, as their most troubling symptom, "a complete loss of voice."[9] In reporting the case of Elisabeth von R., Freud had delineated "the features one meets with so frequently in hysterical people," noting as characteristic Elisabeth's "giftedness, her ambition, her moral sensibility, her excessive demand for love which, to begin with, found satisfaction in her family, and the independence of her nature which went beyond the feminine ideal and found expression in a considerable amount of obstinacy, pugnacity and reserve."[10] Dora, described by Freud as "a girl of intelligent and engaging looks,"[11] showed the same independence and high-spiritedness, as well as the qualities of obstinacy and reserve, that Breuer had noted in Anna O. But now Freud saw in these qualities the process of resistance at work, protecting the repression and challenging the analyst to overcome the patient's reluctance with his powers of interpretation.

Thus Freud proceeds in the analysis to tell Dora the story she was attempting to withhold, relying on clues from her dreams and her inadvertent movements rather than waiting, as Breuer had with Anna O., for her to tell the story herself. Bypassing Dora in this way through her dreams, Freud found evidence of the story he had found in himself—of love for the mother and jealousy of the father, transposed in this case to the opposite sex, but carrying the same telltale features of a guilty love and forbidden sexual acts that led the story to be repressed. Yet Dora had a story of her own to tell. "None of her father's actions seemed to have embittered her so much as his readiness to consider the scene by the lake [with Herr K.] as a product of her imagination," and since her father had brought her to Freud in part to silence that story, which had at its center his affair with Frau K., Dora kept anxiously trying to make sure whether

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Freud was listening, whether he was "being quite straightforward with her."[12]

At the point in the analysis when Dora's opposition began to yield to her curiosity and she raised questions of her own about why she had first remained silent and then suddenly spoke to her parents about Herr K., a counterpoint of two stories emerges and the problem of listening becomes acute. Freud, puzzling over why Dora felt so deeply injured by what seemed a serious proposal, looked upon her telling her parents as indicative of "a morbid craving for revenge," while regarding her silence as appropriate under the circumstances—"a normal girl, I am inclined to think, will deal with a situation of this kind by herself."[13] Dora, focusing on the silence, reports a second dream in which she enacts not only her revenge, but also her search for confirmation of the story that she, in her opposition, was trying to tell.

In the dream, she receives a letter from her mother telling her that her father is dead. She tries to find the railway station, refusing the assistance of a man who offers help and choosing instead to go alone. Seeing the station but unable to reach it, she feels the anxiety of being unable to move. Then, at home, she discovers that her mother and the others had left for the cemetery. In the final part of the dream—initially suppressed, but then released, Freud says, by the forcible impression of his conclusion that the dream portrayed a phantasy of defloration—Dora goes up the stairs and, entering her room, begins to read a big book that lay on her writing table. Interpreted by Freud as fresh evidence of a forbidden sexual curiosity secretly indulged, the dream and its silences also reveal Dora's despair. Discovering that no one is present to listen—her father is dead, her mother has left, feeling accused by others of having abandoned them—her mother writes in the dream that since Dora left home without telling her parents, she had not wished to tell her that her father was ill, Dora relinquishes the hope of assistance and turns to find confirmation on her own, implying through the detail of the writing table that she will tell her story herself.

"I do not know," Freud says, in the postscript that he adds to the case, "what kind of help she wanted from me." But focusing now upon the process of transference, he reveals his belated awareness of a story that had been suppressed. "The longer the interval of time that separates me from the end of this analysis, the more probable it

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

seems to me that the fault in my technique lay in . . . [my] failure to discover in time and to inform the patient that her homosexual love for Frau K. was the strongest unconscious current in her mental life." But to this story of a deeper sexual current running underneath that attached to her father and Herr K., Freud adds a curious ending: that the "remorseless craving for revenge" expressed in Dora's second dream concealed "a contrary current of feeling—the magnanimity with which she forgave the treachery of her friend,"[14] Frau K., and kept secret from everyone the fact that it was she who had betrayed Dora's sexual curiosity to her father, giving him the information he used in discrediting her story about Herr K. Thus the story *not* heard in the analysis was a story of loyalty and love.

It is surprising in light of these early case histories of women's disorders of sexuality and love to find in the *Three Essays on the Theory of Sexuality,* published by Freud in 1905—the same year he released the Dora case—the statement that the erotic life of men alone "has become accessible to research." That of women, by contrast, is "still veiled in an impenetrable obscurity—partly owing to the stunting effect of civilized conditions and partly owing to their conventional secretiveness and insincerity."[15] Although Freud clearly was still feeling the sting of Dora's symbolic slap in the face, his statement also reveals the difficulty he encountered in trying to fit the vagaries of female anatomy and the stories told by his women patients into the scheme that now was emerging from his own analysis and interpretation of dreams. Writing to Fleiss in 1897, during the period of his most intense self-discovery—that he had "found love of the mother and jealousy of the father in my own case too"—he saw the link between his dreams and the great dramas of the Western tradition. Thus he now believed that he had discovered "a general phenomenon of early childhood,"[16] and built his theory of sexuality on this seemingly unshakable internal and historical base.

Yet as he begins the three essays on sexuality by introducing the two technical terms of "object" and "aim"—denoting respectively the person from whom the sexual attraction proceeds and the act toward which the instinct tends, the lines and the problems of his theory begin to emerge. Through this "scientifically sifted observation,"[17] Freud has separated the discussion of sexuality from the language of human relationships, and what gets lost in this sifting are the stories of his women patients.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In the last of the essays, "The Transformations of Puberty," these stories briefly return as Freud observes the difficulty for girls in detaching their libido from their infantile objects and adopting a stance of opposition toward their childhood family relationships. An excessive need for affection and an abhorrence of brute sexual facts, he explains, create in girls an almost irresistible temptation to realize the ideal of asexual love in their lives and to conceal their libido behind an affection that they can express without self-reproach. "By holding fast throughout their lives to their infantile fondness . . . for their parents or brothers and sisters," girls remained, to their own and their husbands' detriment, "in love" with their blood relations.[18]

This separation between the affectionate and the sensual currents of the erotic life then becomes the subject of Freud's *Contributions to the Psychology of Love,* three essays written between 1910 and 1917. In men, this separation creates "the universal tendency to debasement in the sphere of love," the title of the second essay, and leads to the division of women into madonnas and whores—ideals of perfection and debased objects of sexual attention. Noting the absence in women of these tendencies toward overvaluation and degradation, Freud observes instead a "condition of forbiddenness" in women's erotic life. Many women, he observes, try to "keep even legitimate relations secret for a while," and others seem capable of love only in illegitimate hidden relationships. But returning to this subject in his last essay and reporting that "girls often say openly that their love loses value for them if other people know of it," Freud points to a line of explanation that differs from his theme of sexual suppression, saying that in such secret relationships alone, the girl "knows for certain that her own will is uninfluenced—"[19] presumably by the will of others but also perhaps by their interpretations. Again the story returns of something attaching to the idea of love that women are silencing and withholding from observation. As Breuer had noted in Anna O., "There was something she had felt very much offended over and had determined not to speak about it,"[20] but while Freud had uncovered the story about sexuality, there was something elusive about this story of love.

"If mankind had been able to learn [about infantile sexuality] from a direct observation of children,"[21] Freud notes, his three essays on sexuality could have remained unwritten. Prevailing theories about childhood innocence had hindered such observations, blind-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing observers to what otherwise would seem to be inescapable facts. Since the same can be said with reference to women—equally accessible in everyday life—the question arises as to what stories were blinding observation. It is here that the work of Freud is unrivaled in its clarification, since his rigorous logic and meticulous exposition make it possible to trace in detail how the elucidation of one story of love led another to become progressively obscured. Thus it is possible both to follow in his work an eclipse of women that parallels the exposition of his psychology of love and to witness the distortion of women's experience in an attempt to eliminate contradiction.

In 1914, with his essay "On Narcissism," written in the aftermath of his controversies with Adler and Jung, Freud swallowed his distaste at the thought of "abandoning observation for barren theoretical controversy" and decided that he must no longer "shirk an attempt at clarification." Through the analysis of the pure transference neuroses, he had, he said, been "forcibly led" to posit a division in the instinctual life, a separation between ego instincts and sexual instincts that corresponded to the common popular distinction between hunger and love and reflected the individual's twofold biological function of survival and reproduction. Admitting the possibility of error in extending this biological functionalism to a psychological hypothesis, Freud went on to pursue its logical implications in order "to discover whether it turns out to be without contradictions and fruitful."[22]

Yet no sooner had he set forth his first premise than a contradiction threatens to appear. Seeking the origins of the capacity to love, which he equates with maturity and psychic health, he extended his distinction between two types of drives to a distinction between two types of love and built a theory of psychic development on the contrast between love for the mother and love for the self. "A human being has originally two sexual objects—himself and the woman who nurses him," and "although a strong egoism is a protection against falling ill, in the last resort we must begin to love others in order not to fall ill."[23] The ability to love others, however, was premised on the differentiation of narcissism from object-love, and this differentiation in turn was traced to the contrast between mother and self. Since this contrast orchestrated a counterpoint in males between love for the same and the opposite sex, while yielding no such

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

distinction in females, and since this distinction was the pivot for the transference of narcissism to object-love, this was a theory that could not admit women to its account of development.

Then Freud, turning from his initial exposition of theory to dispel the problem that women posed, claimed that while women may love more wisely than man—that is, with less tendency to overvaluation—they do not love as well. Stating that "a comparison of the male and female sexes shows that there are fundamental differences between them with respect to their type of object-choice," Freud offered the disclaimer that "these differences are, of course, not universal" and concludes that "complete love of the attachment type is, properly speaking, characteristic of the male."[24]

With this conclusion, a shift in tone sets in to mark Freud's subsequent writings about women as the observations of his early work, often complex and richly detailed, give way to the barren theoretical controversies of his later essays on femininity and female development. Freud clearly saw his problem but did not know how to resolve it. The fact of gender difference created an asymmetry in early childhood relationships, posing a problem when he turned his attention to the origins of love and thus to the history of relationships. The question was how to represent this difference within the framework of a unified theory.

In attempting to solve this problem, Freud confronted numerous impediments: his theory, his times, his conception of science, and the problem of access to data, a problem compounded by women's reticence. Coming up against an apparent contradiction and seemingly intractable data, he displays his frustration in the tone of his writing and in an argument that sounds, as he says, "tendentious."[25] Having built a theory that could not include women in its account of development, Freud can only defend his theory by showing how women fail to develop. In doing so, he was supported by prevailing views of women as deficient and by the claims of an evolutionary science that equates anatomy with destiny. Yet dismissing the discrepancy posed by women, Freud arrives at a problematic theory of love.

The view of attachment as arising through the transference of narcissism and manifested by the presence of overvaluation[26] ties the experience of love to the projection of an idealized self image onto the other. By joining the metaphor of conquest to the myth of Nar-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cissus, Freud illustrates how the other becomes a mirror—lifeless yet enchanting in the ability to reflect an image. The wisdom about love that Othello achieves is gained tragically by the shattering of this mirror—in the belated recognition that in seeking self-reflection he had in fact destroyed his love. But while loving too well connotes the blindness of overvaluation, loving unwisely signifies for Othello his failure to perceive the value of Desdemona. Freud, separating love from wisdom, implies that the ability to see the other signifies the absence of transference and therefore of love. Thus women's perceptions of others render them, by definition, incapable of love.

Describing the "different course" followed by female development in its "purest and truest" type as one in which the child's original narcissism fails to transfer to the sexual object and is instead intensified at puberty in a way that is "unfavorable to the development of any true object-choice,"[27] Freud proceeds to set forth a series of distinctions between the sexes. Comparing men's love for women with women's continuing fascination with themselves, contrasting the intensity of male attachment with the intensity of female narcissism, claiming that the activity of men's love for women finds its counterpart in the passivity of women's need to be loved, he arrives at the point where his theory has blinded him to the reality of women's experience—but also to his own experience with women, recorded in his letters and evident in his life.

"My dear Frau Lou," Freud writes to Lou Andreas-Salomé in 1916, two years after the narcissism paper, "You are an 'understander' *par excellence;* and in addition you invariably understand more and improve upon what is put before you . . . you come along and add what is missing, build upon it and put what has been isolated back into its proper context." Writing to Marie Bonaparte in 1938, he acknowledges the "self-effacement with which you give your energies to the introductions and popular expositions of psychoanalysis. . . . You claim to be so very ambitious and to long for immortality at any price! Well, your actions testify to a nobler character."[28] As these portrayals of women contrast with the image of women in Freud's scientific writings, the efforts by women to elaborate Freud's theories perpetuate a central silence.

During this time, when Freud was surrounded by women in his professional as well as his personal life, when he maintained exten-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sive correspondence with women and showed evidence of deep friendship, his claims not to know about women become increasingly insistent. The constraints on his knowledge arose in part from the limitations of theory construction ("I know that in writing I have to blind myself artificially in order to focus all the light on one dark spot").[29] In part, they reflected a society where women's lives were not considered to inform human possibility, a society where virtue for women was equated with innocence and self-sacrifice. But constraints also arose from a conception of objectivity in science that led to a series of enforced separations, reflected in the design of Freud's laboratory—the analytic situation.

The problem posed for psychology by the differences between male and female relationships was clear: "We have, after all, long given up any expectation of a neat parallelism between male and female sexual development." The representation of these differences, however, remained problematic. From women analysts, Freud heard reports of a love between girls and their mothers that was "built up in a very rich manner" and lasted for an unexpectedly long period. Yet, when cast in the language of psychoanalytic theory which from the beginning had obscured its representation and when observed in the context of the analytic setting, this love seemed "so difficult to grasp . . . so grey with age and shadowy and almost impossible to revivify," that Freud concluded it lay buried in psychic prehistory.[30]

As the masking of truth becomes self-evident with Freud's claim that the girl must "acknowledge the fact of her castration,"[31] his impression of a vision obscured is conveyed by repeated admissions of difficulty in seeing what women want or how they develop. "The sexual life of adult women is a 'dark continent' for psychology,"[32] Freud writes in 1926. In 1932 he reminds his reader that the "riddle of femininity" remains unsolved. His knowledge of women is, he says, "fragmentary and incomplete: if you want to know more, enquire from your own experience of life, or turn to the poets, or wait until science can give you deeper and more coherent information."[33]

This "huge eclipse"—Othello's phrase as he realizes that "I have no wife"—was, however, not seen by Freud to darken his theories of sexuality and love. Women, placed on a continent apart, remained a subject for future investigation, but the failure to see a problem in this dissociation reveals the underlying premise of separation. Libido was a drive, and love was transference in the en-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

larged sexuality of psychoanalysis—modeled, as Freud said, on "the Eros of the divine Plato,"[34] and arriving at a similar separation of women from the erotic life. While Plato focused his attention on the transformation of Eros from earthly appetite to Beauty in its pure form, seeing in love the force that leads the soul away from the body and toward perfection, Freud preferred, as he wrote in a letter to Binswanger, to live "in the basement of the building."[35] There, he said, he could find a home for all the higher forms of civilization as aim-inhibited forms of gratification—only women seemed to elude a place in his "lowly hut." Like Plato's prisoners, chained in a cave and unable to separate the shadows from the sun, Freud's man in the basement was caught in a solitary chain of illusions, unable to differentiate others from the shadows cast by himself.

In a wistful letter written in the last year of Freud's life to Rachel Berdach, a German writer, he says that her "mysterious and beautiful book [*Der Kaiser, die Weisen und der Tod*] has pleased me to an extent that makes me unsure of my judgment." "Who are you?" he asks, and "Where did you acquire all the knowledge expressed in your book?"[36] The mystery of women thus continues like the willow song that Desdemona sings. Women's love, but also, it seems, women's knowledge, continued as an underground story, eclipsed in part by the separation of judgment from feelings, in part by the ascendance of another story. As the constraints that kept Freud from reflecting on the nature of women as revealed to him through his own experience joined with constraints that led women toward self-effacement, they created a powerful bind against discovery. Women remained a continent largely unmarked on the growing map of human experience, and Freud's psychology of love both explained and extended this disjunction.

Since Freud, psychoanalysts have increasingly turned their attention to problems of human relationships, focusing in particular on the deep stratum of connection between mother and child. But in doing so, they have continued to use Freud's terminology of "objects," which carries with it the premise of separation by casting the other always in the image of the self's gratification. In attempting to expand this language, grounded in separation, to the exploration of human connection, the object-relations theorists have created a landscape of love unparalleled in its depersonalization. In this world,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

where people are "objects" and relationships "holding environments" designed to facilitate separation, love becomes cast in metaphors of illness rather than health. Thus, in Winnicott's description, the "good enough mother" in her "primary maternal preoccupation" sinks into a "withdrawn state" resembling a "dissociated" or "schizoid episode," in order to enable her infant to become the "owner of his sensations."[37] This strange language of love directly connects with the language of separation that defines the current psychology of self,[38] and the common vocabulary of borders and boundaries, splitting and fusion, creates an imagery of love that is indistinguishable from the imagery of war. If the weather was bad in the world of sexuality during the time in Vienna when Freud wrote, it seems, if anything, to be worse in the present-day world of love. The raincoat of lies under which Freud observed people to conceal their sexual lives finds its parallel in the shield of detachment that currently conceals the experience of love. Yet the good enough mother, in her ability to "feel herself into the infant's place,"[39] keeps alive in her silence an underground story about a different experience of self in relationship. Although the story of her development, curiously, has never been traced, it is of particular interest for the psychology of love, holding in it the promise of elucidating a love that combines intensity and wisdom, a love that is neither exclusive nor finite but at once constant and changing. In contrast to the image of women as either self-absorbed or self-effacing, the study of women may bring to psychology a language of love that encompasses both knowledge and feelings, a language that conveys a different way of imagining the self in relation to others.

"How would you describe yourself to yourself?" Two nine-year-old children reply: "I am just one person. Describe myself to me? But I am only one person, so how would that be? I don't know." "Well, I would say—hmm—that's a tough one. I'm honest, I'm mean to my sister—umm, I'm kind, nice—Well, kind and nice are almost the same, right? So, I would say—kind, and I'm a good friend-maker." These contrasting portrayals of self in relation to others—of being only one person and of being a good friend-maker—recur in the responses of Jeffrey and Karen who were interviewed when they were eight. "How would you describe Jeffrey to yourself?" "He's got blond hair. Umm—he has a hard time going to sleep. And he bugs everybody, and he fights everybody. He learns how to do things;

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

when he thinks they're going to be hard, he learns how to do them. That's it. I'm lazy." Answering the same question, slightly rephrased—"If you were going to tell yourself about yourself, what would you say?"—Karen replies: "I don't know. I do a lot of things. I like a lot of things. I get along with everybody. And I get mad not too easy. And, umm, I've made a lot of new friends. And, umm, I don't know if everyone thinks this, but I think I tell the truth most of the time."

The portrayal of connection that appears in these girls' descriptions of themselves, representing not only the tie to friends but also the activity of friend-making, contrasts with the boys' portrayal of a self bounded in separation. And these different modes of self-description, although not tied to gender in any absolute way, are tied to different standards of judgment and self-evaluation. Jeffrey's talk about fighting implies a standard of fairness and reciprocity, while the girls' activities of friend-making imply a standard of care and response. These different perspectives on self in relation to others also color the form that self-description takes, since the focus on connection leads toward the creation of a dialogue as the girls ask for the interviewer's opinion or wonder what other people think, while the focus on separation is manifest in the boys' demonstration of their ability to think for themselves.

As the lives of women are repeatedly overlooked in descriptions of the human life cycle, particularly in the adult years, and the differences heard in the voices of these children are subsumed in the unilinear representation of current stage theories, we see a psychology impoverished in its representation of love. The hierarchical ordering that buries the lives of women in a dimly lit past and casts differences into a narrowing mold, joining classification with seriation to answer the question of who is better and who is worse, extends to the portrayal of relationships as well, creating an imagery where connection is explosive and conquest becomes the metaphor of love. Yet women and girls, through their portrayal of self as defined through connection to others and of connection as sustained through activities of care and response, bring to the psychology of love a vital imagery of relationships, delineating a line of development that once seen can then be identified also in the lives of men.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"See better, Lear," Kent advises, as Lear proceeds to divide his kingdom on the basis of a faulty perception of love. But in order to see, Lear first must remove the accoutrements of his separation, the layers of power and conquest, authority and justice, in order to feel "how this mother swells up toward my heart." Only through this explicitly feminine connection—cast as an experience of illness and pain—can he become a man who can know "this lady to be my child Cordelia."[40] The theme of men blinding themselves to love by separating themselves from the world of women, dramatized by Shakespeare in *Love's Labour's Lost,* extends through the tragedies with the demonstration of the fatal consequences of this blindness in *Othello,* culminating with the exposition of the process of recognition in *King Lear.*

As Lear, defining and redefining what it means to be a man, comes through the climbing sorrow of his *hysterico passio* to see a world that previously had been unknown, he finds in the experience of connection a different story of love—a story that is about living and praying and singing and telling old tales and laughing at gilded butterflies and hearing poor rogues talk of court news and talking with them too—"Who loses and who wins / who's in and who's out— / And take upon's the mystery of things, / As if we were God's spies." This love that is neither an appetite seeking gratification nor an oceanic feeling of fusion—the exclusive terms that Freud describes—but instead a middle conception, grounded in the daily activities of life, tied above all to the activity of communication, contains within it a sense of reciprocity—"When thou dost ask me blessing, I'll kneel down / And ask of thee forgiveness"—but reflects more saliently Lear's discovery of the meaning of Cordelia's silence and of his own capacity for response.

ENDNOTES

This essay in an earlier version was presented at the Christian Gauss Seminars at Princeton University in October 1982. I am grateful to Samuel Hynes and Patricia Spacks, who read the manuscript and offered comments that were most helpful to its revision. The responsibility for errors remains my own. The interview excerpts cited in this essay are taken from research that was supported by a grant from the National Institute of Education.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[1]Jean Piaget, *The Moral Judgment of the Child* (New York: Free Press, 1965/1932.), p. 196.
[2]Iris Murdoch, *The Sovereignty of Good* (London: Routledge & Kegan Paul, 1970), pp. 1-2.
[3]Carol Gilligan, *In a Different Voice* (Cambridge: Harvard University Press, 1982); Nona Lyons, "Two Perspectives: On Self, Relationships, and Morality," *Harvard Educational Review* 53 (1983): 125-45. See also her "Conceptions of Self and Morality and Modes of Moral Choice" (unpublished doctoral dissertation, Graduate School of Education, Harvard University, 1982).
[4]Lawrence Blum, *Friendship, Altruism and Morality* (Boston: Routledge & Kegan Paul, 1980).
[5]Martin Hoffman, "Empathy, Role-Taking, Guilt, and Development of Altruistic Motives," *Moral Development and Behavior,* edited by T. Lickona (New York: Holt, Rinehart and Winston, 1976), p. 124.
[6]Joseph Breuer and Sigmund Freud, *Studies on Hysteria* (1893-95) (*Standard Edition,* vol. 2), pp. 29, 25.
[7]Ibid., p. 29.
[8]Ibid., pp. 272, 273.
[9]Sigmund Freud, "Fragment of an Analysis of a Case of Hysteria." (1905) (*Standard Edition,* vol. 7), p. 22.
[10]Breuer and Freud, *Studies on Hysteria,* p. 13. This description is striking in its parallel to current portrayals of young women suffering from *anorexia nervosa.*
[11]Freud, "Fragment of an Analysis," p. 23 .
[12]Ibid., pp. 46, 118.
[13]Ibid., p. 95.
[14]Ibid., pp. 108-9, 104, 122, 120.
[15]Sigmund Freud, *Three Essays on the Theory of Sexuality* (1905), p. 151.
[16]Sigmund Freud, *The Origins of Psychoanalysis: Letters to Wilhelm Fleiss* (New York: Basic Books, 1954), p. 223.
[17]Freud, *Three Essays,* p. 136.
[18]Ibid., pp. 227-28.
[19]Sigmund Freud, *Contributions to the Psychology of Love* (1910, 1912, 1918) (*Standard Edition,* vol. 11), pp. 179, 186, 203.
[20]Breuer and Freud, *Studies on Hysteria, p.* 25.
[21]Freud, *Three Essays,* p. 133.
[22]Sigmund Freud, "On Narcissism" (1914) (*Standard Edition,* vol. 14), pp. 77, 79.
[23]Ibid., pp. 88, 85.
[24]Ibid., p. 88.
[25]Ibid., p. 89.
[26]Ibid., p. 91.
[27]Ibid., p. 88.
[28]*Letters of Sigmund Freud,* edited by Ernst Freud (New York: Basic Books, 1960), pp. 312, 454-55.
[29]Ibid., p. 312.
[30]Sigmund Freud, "Female Sexuality" (1931) (*Standard Edition,* vol. 21), pp. 225, 226.
[31]Ibid., p. 229.
[32]Sigmund Freud, *The Question of Lay Analysis* (1926) (*Standard Edition,* vol. 20), p. 212.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[33]Sigmund Freud, "Femininity" (1932) lecture 33 of the *New Introductory Lectures on Psychoanalysis* (*Standard Edition,* vol. 22), pp. 116, 135.

[34]Freud, *Three Essays,* p. 134. See also Susan Pollak, "A Bittersweet God: The Concept of Eros in Plato and Freud." (Qualifying Paper, Graduate School of Education, Harvard University, 1983).

[35]*Letters of Sigmund Freud,* p. 431.

[36]Ibid., p. 457.

[37]D.W. Winnicott, *Through Paediatrics to Psycho-Analysis* (New York: Basic Books, 1975), p. 302.

[38]Otto Kernberg, *Object Relations Theory and Clinical Psychoanalysis* (New York: Jason Aronson, 1976); Heinz Kohut, *The Analysis of the Self* (New York: International University Press, 1971).

[39]Winnicott, *Through Paediatrics to Psycho-Analysis,* p. 304.

[40]I am indebted in reading this passage to Coppélia Kahn, whose paper, "The Absent Mother in King Lear," (in *Rewriting the Renaissance,* edited by M. Ferguson et al., Chicago: University of Chicago Press, 1984) I heard at a symposium on Freud at Swarthmore College, in 1982.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Donald N. McCloskey

The Literary Character of Economics

THE TRIADS THAT CORRESPOND in French to our English "natural sciences, social sciences, and humanities" are *les sciences naturelles, les sciences sociales, et les sciences humaines;* and in German, *die Naturwissenschaften, die Sozialwissenschaften, und die Geisteswissenschaften.* In both, and even in the third term of both—the term for studies of poetry and language and philosophy, studies discursive and decidedly literary in form—there appears a scienceword. But in French and German, and in other continental languages, it is not properly understood as English "science," with what that august word connotes of numbers, laboratory coats, and decisive experiments publicly observed. Although German usage, like German politics, has since the last war bent a little to the ways of Britain and America, the German speaker has, on the whole, less opportunity to use *Wissenschaft,* or the French speaker *science,* as a club to batter wordfolk with. Nor can it be so easily used, the way it is by the English-speaking literati, as a curse against the anti-art, that blackest art, the bane of sweetness and light. In French and in German, it merely means "disciplined inquiry," as distinct from, say, journalism or common sense. It does not mean "quantitative," and does not warrant use as an epithet—wine-dark Science or the Scientist of the golden hair—as Lord Kelvin used it in 1883: "When you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind: it may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the stage of *science.*"[1] In continental languages, the scienceword has no special epistemological clout.[2]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The point is that the continentals, uncharacteristically, have gotten it right. It is right that a sentence such as "Literary criticism is a science" or, to get to the issue at hand, "Economics is a science" should not be the fighting words they are in English. The fighting lacks purpose, because, as our friends across the water could have told us, nothing important depends on its outcome. Economics in particular is merely a disciplined inquiry into the market for rice or the scarcity of love. It is a collection of literary forms, not a science. Indeed, science itself is a collection of literary forms. And literary forms are scientific.

None of these remarks, repeated in the past decade by dozens of philosophers and historians of science, is intended to imply that science is inconclusive or that literature is cold-blooded. Science daily uses art for urgent practical purposes. That aesthetic judgments must be made before one out of the myriad of theories in particle physics is selected for the immensely expensive experiment required for testing it makes science neither arbitrary nor flimsy. As Steven Weinberg said recently about an experiment testing his own piece of the physicist's art:

> That experiment cost some $30 to $40 million dollars, not for the accelerator you understand, just for the experiment using the accelerator. . . . This is an enormous commitment of your money and our time, one that can only be made when the judgment has been made that the theory is worth testing, and that judgment is very often entirely a matter of how beautiful we think the theory is.[3]

Kenneth Burke, coming from the literary side, speaks of the persuasiveness of elegant forms: "a yielding to the form prepares for assent to the matter identified with it."[4] And, of course, art in turn uses science for urgent practical purposes, too. Statistics are forms, figures of speech in numerical dress. Since the Renaissance, textual criticism has depended heavily on the logic of probability and the counting of frequencies, yet by improving a text of Macrobius in this way, we have not devalued its literary qualities.[5] The holy of holies among the devout—but simple—is Popperian falsifiability in its vulgar form. In attacking its pretensions to be the very meaning of meaningfulness, Wayne Booth, another literary man, notes that "the test is a powerful one, in dealing with certain problems; I use it myself in trying to test my own guesses about how literary works are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

put together. But stated as a universal dogma it is highly questionable."[6] The only dogma worth promulgating is no narrowing one—that is, in a good argument, artistic and scientific modes of thought interpenetrate one another.

Moderns view the interpenetration of science and art as a contravention of God's law, one that is likely to give birth to monsters. Though popular these three centuries now, the view has never been very reasonable, reasons not being the modernist's strong point. Scientists of all sorts, however, and in particular economic scientists, think and persuade with metaphors, authority, and considerations of symmetry, beauty, and moral weight, just as humanists of all sorts think and persuade with numbers, experiments, and considerations of economy, power, and predictive force. The proportion in which they select the various tools of thought will depend on what exactly they are thinking about, not what allegiance they have to the literary or mathematical branches of the intelligentsia.

Many economists embrace with considerable warmth the view that economics is literary; others react against it with equal warmth. Some might consider it odd for people to become so impassioned about matters of method that are after all not very important in what they do each day. No study of the market in groundnuts or Treasury bills will change much if the scholar thinks of himself as an artist rather than a scientist, or as a scientist who down deep thinks like an artist. Still, the strength of the humanist's desire for theological grounding, or the scientist's for axiomatic foundation, is unflagging, although neither, each with its accompanying Methodology, will matter much to the daily work of the scholar. A species that can commit murder wholesale because its victims have not given proper weight to transubstantiation or to the transformation problem apparently has trouble keeping merely methodological questions in perspective. The answers given provide them with identities as Protestants or Marxists or Scientists. Economists are not unlike most others in wanting an up-to-date persona, and many of them are quite enthusiastic about identifying their field as social physics and themselves as expert social engineers. Such an identity has many comforts, among them, "It's none of my business that they're sticking cattle prods into people over at the soccer stadium: I just work here." Put another way, to show that economics resembles literary criticism, philology, and social theory as much as particle physics

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and dam building, can either thrill economists with a wild surmise or leave them trembling with rage.

If we would overturn the authority of science in economics, we must question the usefulness of drawing a line between science and art. Some economists will no doubt turn livid at the very thought, but those outside the field will merely yawn, never having been convinced of the validity of the scientific claim anyhow. All they know about economics is what they read in the papers, but they know what they don't like—and besides, it's not science. This is the wrong approach. Economics *is* science, and a brilliantly successful sort at that. It explains as much about businesspeople and resources as evolution explains about animals and plants, for identical reasons. The claim is not that economics is mere humanism because it is a failure as a science, but that all sciences are humanism—and not *merely*—because that is all there is for humans to be.

More is at issue, in short, than the membership of economists in the National Academy of Sciences. What is at issue is "modernism," what Wayne Booth identifies as the "key test of modernity" in intellectual matters, "the automatic reliance on the distinction between facts and values . . . , the belief that you cannot and indeed should not allow your values to intrude on your cognitive life—that thought and knowledge are on one side and affirmations of value on the other."[7] Booth notes that although modernism served well in earlier wars, it is now decrepit. In its wild youth it begot scientism, the doctrine which holds that the only sort of cognitive life is the scientific. Scientism damaged the ability to understand, confining psychologists to theories that until recently made no use of the unconscious mind, and economists to theories that until recently made no use of psychology.

The antimodernists want to revive certain writers who for long have been neglected, especially in the English-speaking world, because they would not accept this or that piece of the modernist/scientismic orthodoxy, such *bêtes noirs* as the Greek sophists, Cicero, scholastic philosophy, and Hegel. They include in more recent vintage the American pragmatists, out of philosophical fashion now for quite some time, whose work was long viewed as an amusing but crude approximation of what was properly done in Vienna or Cambridge:

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I write them out in a verse:
James and Dewey and Peirce.
Sweetness and light enough,
In math not quite up to snuff.[8]

More recently still, the antimodernists include continental philosophers (Heidegger, Habermas, et al.), certain unconventional observers of science (Polanyi, Koestler), renegade analytical philosophers (Stephen Toulmin and Richard Rorty), social scientists using nonquantitative methods (from Freud to Piaget and Fraser to Geertz), philosophers and historians of science after Thomas Kuhn—and literary critics in profusion.

The point is to apply such thinking to economics. If they knew the lingo, most economists, at least most English-speaking economists, would rejoice in the title of modernists and scientismists. Their conversations about methodology use locutions that went out of fashion in philosophy thirty years ago. The evidence that economists are philosophical modernists is of various sorts: methodological declarations; the feeling, which anyone fluent in economics has, that modernism rules; and the reaction to papers like this one, in which some readers will almost certainly be heard to mutter that "ultimately" the only "fundamental" proof of an economic assertion is "objective," quantitative "tests."[9] It will not do, therefore, to say of the methodological rules of economists, "No one believes *that* stuff anymore." No one, perhaps, in sophisticated departments of philosophy (though it is not easy to explain otherwise the heated reactions of some philosophers to writers like Rorty or Toulmin), but a modernism of the cruder sort still thrives in the harder sciences, such as economics.

That economists believe themselves to be modernists does not mean that in their actual scholarly practices they are; the jokes they tell one another about the work they do, for instance, make any such assumption dubious. A memorandum circulated last year among the staff at the Council of Economic Advisers, for instance, included the following: "Mankiw's Maxim: No issue in economics has ever been decided on the basis of the facts"; "Nihilistic Corollary I: No issue has ever been decided on the basis of theory, either"; "Frisch's Restatement: Never let the facts stand between you and the right answer"; "McCaleb's Policy Prescription Principle: All policy impli-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cations drawn from economics are matters of faith."[10] Laboratory humor sustains all modernist scientists in their madness. The genre of the Humorous Law, after all, was invented by engineers, and even physicists have their fourth and fifth laws of thermodynamics: no piece of experimental apparatus works the first time it is set up; no experiment gives quite the expected result.[11] But the jokes in the physical sciences appear to corrode morale less than those in economics. The *Journal of Irreproducible Results* laughs regularly at the pomposities of Science (and pomposity is the target of similar pieces in the humanities, such as the classics[12]), but the humor takes a nasty turn when it touches certain fields: economics, sociology, and medicine, in all of which a methodology has taken an unusually fetishistic form. The neuroses produced by attempts to make life, especially human life, fit into a methodology that did not describe well the seventeenth-century physics for which it was designed breaks out from time to time in unpleasant ways, far removed from joking: in the biological sciences, for instance, in occasional fraud. One wonders about similar pressures in economics. The nervous little jokes that young American economists tell around the watercooler are outlets for anxieties too painful to admit. Freud knew.

The joke, of course, is on the Official Method. The ridiculousness of it all may be seen by locating Method in a hierarchy of metaeconomics, from shopfloor to boardroom. At the bottom stands method with a small *m*, ever humble and helpful, something no reasonable person would ever complain of or even joke much about. It tells the economist what to do when her data have been selected in a particular sort of biased way or what to do when she can't think of reasons for price and quantity to change in a certain market. It tells her, rather badly, how to write scientific prose, and, pretty well, how to grasp a situation in which profits remain to be earned by new entrants. Following Joan Robinson, economists call these their box of tools, namely, economic theory in its verbal and mathematical forms, statistical theory and practice, familiarity with certain accounting conventions and certain statistical sources, and a background of stylized historical fact and worldly experience. The use of such tools to fashion sturdy little arguments is the métier of the economist.

Far above method with a small *m*, at the peak of the scholarly enterprise, stand the conversational norms of civilization. Jürgen Ha-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

bermas and the tradition he comes from call these *Sprachethik*.[13] Don't lie; pay attention; don't sneer; cooperate; don't shout; let other people talk; be open-minded; explain yourself when asked; don't resort to violence or conspiracy to push your ideas. Good conversation or good intellectual life is unimaginable without these, for they are the metarules implicitly adopted by the mere act of joining what the culture thinks of as a conversation, whether among economists about how to manage the economy or between parents about how to manage their teenager. Socratic dialogue at its best—that is, when his interlocutors are permitted to say something besides, "So it would seem, Socrates"—has been the model of the best intellectual discourse. That we don't always follow the model is considered blameworthy, but no reason to abandon it as a norm. Cynicism about it is widely considered to be evil. The worst academic sin is not to be illogical or badly informed but to show cynical disregard for the norms of scholarly conversation.[14]

In between the top and the bottom, an overfed middle manager in a green suit with a row of ballpoint pens in his breast pocket, well below the cool majesty of *Sprachethik* and well above the workaday utility of method with a small *m*, stands Methodology. Because it cannot claim to give specific practical advice, it is not "method." Because it does not claim that it can speak well in our culture, or in economics, it is not *Sprachethik*. It is Methodology, an alleged generalization from particular fields, especially scientific fields, to a science of science in general. What is laughable about it is that, like the *bourgeois gentilhomme* in society at large, it is at once both master and slave, and inclined, therefore, to hypocrisy and double-talk, to humility and pomposity—at the feet of one class and at the throat of another.

The schools of economics vary in their attachment to, say, quantification, but all are Methodologists. A Marxist Methodology, for example, would have rules such as, *The history of all hitherto existing society is the history of class struggle; Use statistics, which are scientific; Beware of remarks infected by false consciousness*. Neoclassical Methodology, the dominant one in the English-speaking world, would say, among other things, *The history of all hitherto existing society is the history of interactions between selfish individuals; Use statistics, which are scientific; Beware of remarks that are nonfalsifiable or nonobservable*. Austrian Methodology would say,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The history of all hitherto existing society is the history of interactions between selfish individuals; Never use statistics, which are transitory figments; Beware of remarks that do not accord with Austrian Methodological precepts.

Similar rules pertain to other modern schools, or to more subtly divided subschools among them. All share the mad Cartesian idea that practice according to the whatever-it-is below *Sprachethik* and above plain method will give a great harvest of truth.

Most defenses of Methodology get whatever force they have by stealing prestige from *Sprachethik* or utility from method. The reply, for instance, that "you *must* have a methodology hidden *somewhere*" is practically true only if the Methodology takes over the practical rules of method, and is morally true only if it takes over the moral rules of *Sprachethik*. It is a poor thing when out on its own. The wider case against Methodology has been made elsewhere.[15] Part of the case against it is its startling leap, full grown, from the brow of Descartes.[16] The Whiggish theory of scientific history that attributes the success of physics, chemistry, and biology to the application of Scientific Methodology à la Descartes looks strained beside the accumulating evidence that scientists think like human beings, too.[17] In actual practice, Methodology serves merely to demarcate the nice us from the nasty them; it demarcates "science" from "nonscience." Once we have properly marked off nonsciences like astrology, psychoanalysis, acupuncture, nutritional medicine, Marxist economics, spoonbending, or anything else we do not wish to discuss, we can get on with it clear and cool in mind.[18] Methodology and its corollary, the demarcation problem, are ways of stopping conversation.

All this sciencetalk is fruitless and offputting. Economics is literary, too. Saying that something is "literary" means that one can speak of it as people speak about drama, poetry, and novels, and the study of them. The statement "Economics is scientific" implies that things can be said about economics and economies that use mathematics; that economics will emulate the rhetoric of controlled experiment; that economics will have "theorems" from mathematics and "findings" from experiments; that it will be "objective"; and even that the world it constructs, to use Nelson Goodman's way of talking, will have a certain character, captured in the penetrating phrase, "the unreasonable effectiveness of mathematics." All these

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

implications about economics are true. But equally true is another set of implications, usually and erroneously thought to be antithetical, derived from the sentence, "Economics is literary."

The literary character of economics shows at various levels, from the most abstract to the most concrete, from Methodology to the selling of diamonds. Methodology comments on workaday method (the so-called box of tools), method in turn comments on economics as a body of thought, and economics comments on the economy. One can make literary remarks about each of these levels.

For example, the workaday methods of economic scientists are literary, since the scientific paper is, after all, a literary genre, with an actual author, an implied author, an implied reader, a history, and a form.[19] When an economist says, as he frequently does, "The demand curve slopes down," he is using the English language, and if he is using it to persuade, as he frequently is, he is a rhetorician, whether he knows—or likes—it or not. A scientific paper—and the assertions within it, such as this Law of Demand (that when the price of something goes up, the demand for the something goes down)—does literary deeds. The economic scientist is a linguistic actor, and to his performance can be applied the dramatistic notions of Kenneth Burke or the philosophers J.L. Austin and John Searle. Scientific assertions are speech-acts made in a scene of scientific tradition by the scientist-agent, through the agency of the usual tropes, for purposes of describing nature or mankind better than the next fellow. Searle's analysis of the Law of Demand for gasoline would go as follows:

The *utterance* act (speaking): "*th*e di-mand′ kurv fôr gas′ e lēn′ slōps doun."

The *propositional* act (logic): "*The demand curve for gasoline* (referent) slopes down (predicate)."

Illocutionary act (rhetoric, argument, attempt to persuade): "Believe me, the demand curve for gasoline slopes down."

Perlocutionary act (the reader's response, the result of the illocutionary act): "By God, you're right: the demand curve for gasoline *does* slope down."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The error is to think that one is engaged in the propositional act, which is a matter of formal logic, when in fact one is engaged—all day, most days—in illocutionary acts, which are rhetorical. The pragmatists, too, said this. Propositions are to be judged by their effects or, as it was put by William James, with (as Burke noted) "disastrous felicity," their "cash value." Scientists are trying to persuade other scientists when they affirm a Law. The way they do this draws mostly on the common topics of argument such as one might see in *Areopagitica* or "A Modest Proposal for Preventing the Children of Ireland from being a Burden to their Parents or Country." Consider the good reasons that economists believe the Law of Demand to be persuasive:

• Certain very sophisticated statistical tests, in which every allowance has been made for possible biases and incompleteness, have often resulted (after a good deal of hand-wringing and squeezing of the computer) in the diagonal elements of certain matrices being negative at the 5 percent level of significance. These painfully complete imitations of the astronomer's most careful observations are known among economists, from the location of the observatory, as those of the Rotterdam School.

• Cruder and less well-controlled observations of certain commodities, especially agricultural commodities such as feed corn, have usually resulted in negative coefficients on price. These are known as Iowa School results, from the invention at Iowa State University of quantitative agricultural economics. But the chief result of the culmination of this work, the study by Houthakker and Taylor of all commodities in the American economy, was that the Law was not powerful; that demand often did not fall much when the price rose, and sometimes did not respond at all.

• In recent years, a few actual experiments have been run, with animal and human subjects, and they have often rejected the Law.[20]

• Introspection is quite persuasive. In asking himself, "What would I do if the price of gasoline doubled?" the economic scientist, if properly socialized in economics, will answer, "Consume less." In the same way, a poet might ask what she might do if she saw heather or a wave, or a textual critic might ask how he would react to a line

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of Catullus if "*quod, o patrona virgo*" were emended to "*quidem est, patroni ut ergo.*"

• Thought experiments are persuasive, too. The economic scientist, in view of his experience of life and knowledge of economies, asks what other people might do if the price of gasoline doubled. In the same way, a novelist might ask how Huck would respond to Jim's request to come up on the raft, or a critic might ask how likely it is that Spenser would have arranged "Epithalamion" in the precise cycle of the year.

• Actual cases will have weight, as when the large rise in gasoline prices after the embargo caused consumption to decline in the face of predictions from noneconomists that it would not. In the same way, Booth notes, "the most sensitive book-length theological account . . . lacks something that men know together, when in answer to the question, 'What is the life of man?' they answer, 'There was once in Bethlehem . . .' "[21]

• Businesspeople, with the incentive of profit to know, believe the Law is true because they cut prices when they wish to stimulate demand. What mere professor would dispute such testimony? The argument is *ad hominem,* from the very character of its target, in the same way that a literary critic might defend the authority of the author (who has an incentive to know what he means) against the claims of the reader as playful maker of his own text or of the text itself as semantically autonomous.

• The authority of scientific tradition is a proper argument in economics as elsewhere (though "proper" does not mean "irrefutable" or "conclusive"). If many wise economists have long affirmed the Law of Demand, what mere latecomer would dispute their testimony? Science or scholarship cannot be cumulative if every question is reopened every ten years. In the same way, Keats acceded to the tradition established by Virgil, and carried on by Spenser and Milton, of beginning a poetic career with pastoral verse; and the New Criticism worked in its tradition for many years, undisturbed by thoughts of biography or reader.

• Very commonly, and even to some degree here, symmetry will be a persuasive argument. If there is a Law of Supply (and there is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ample reason to think there is), it is hard to resist the charm of a Law of Demand to match it. In the same way, the critic will search for the structure behind the symmetry he feels in "Ode to a Grecian Urn," and find it in a symmetry of beautiful act and truthful scene.

• Mere definition is a powerful argument for the Law, since a higher price of gasoline leaves less, by definition (in one definition), for other expenditures. Since less gasoline is bought when expenditure overall declines, the demand for gasoline declines. In the same way, the critic can define the elements of discourse as act, scene, agent, agency, purpose, leaving less for nondramatistic metaphors of interpretation.

• Finally, and most important, there is analogy. That the Law of Demand is true for ice cream and movies makes it much more persuasive that it is true for gasoline. Analogy gives the Law its majesty, for economists claim that it applies therefore to all manner of things and nonthings, to love, to status, and to political power. In the same way, the critic can argue that a technique of understanding that works for poems will also work for novels, to the extent that poems and novels are analogous, and the poet and novelist themselves can exploit analogy for ironic comment or thematic development or portrayal of character.

These are all good reasons for believing the Law of Demand, but only the first three are scientific by the dichotomous definition of modernism. The other eight are artistic, literary, rhetorical. The modernist will try to reduce the eight to the three, but he might better be employed reducing the three to the eight: it is easier to see how the efficacy of general equilibrium, simultaneous equation, three-stage least squares methods of fitting complete systems of demand equations depends on the authority of the traditions about error terms or the appeal of symmetry as an aesthetic principle of specification than to see how analogy and introspection can be reduced to econometrics. Close scrutiny of the arguments on the scientific, hard, numerical side of the demarcation line will reveal them to be as humanistic, soft, and verbal as the rest.

In any event, it will be apparent that arguments fitting a modernist Methodology are not the whole story. As an empirical matter in this case, in fact, they are a rather small part of the story. Few econo-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

mists would place more than 15 percent of their confidence in the Law of Demand on the first three reasons in total, leaving 85 percent to literary as against scientific rhetoric. One can test whether this is true by asking any economist, who will testify to its truth by introspection. Or one can observe what arguments an economist uses when trying to convince unbelievers, such as students. Much of his argument will rely on introspection, and he will encourage the students to examine their own introspections and improve them by critical thinking. He will exhibit the few cases he can remember, especially the more extreme ones, such as the oil crisis, and will try to build on analogy with products that the students do believe follow the Law. For the rest, he will appeal to the identity of convex utility functions and the authority of the scientific tradition. No matter how sophisticated the class is, it will be a rare teacher—and then, only one bewitched by modernist incantations—who relies much on the econometric results from the data mine and its miners.[22]

Economic scientists, then, persuade with many devices, and as rhetoricians have an audience. They do not speak into the void: the rhetorical character of science makes it characteristically social. Burke points out that "a man is necessarily talking error unless his words can claim membership in a collective body of thought."[23] The final product of science, the scientific article, is a performance of a certain sort, often disingenuously so.[24] In economics, certainly, it is no more separated from other literary forms by epistemology than the pastoral poem is from the epic. Epistemology is not the point. Or, rather, the point is that the epistemology of economic science must be construed more broadly if it is to be construed well. It is not scraps from the table of the logicians and statisticians, cooked up by certain Austrian philosophers of science into a gruel insufficient to nourish a child in science, but a collection of arguments, a Socratic dialogue, a rhetorical feast for adults as rich as human persuasion can make it.

The activities of economic scientists are *about* economic theory. But the theory itself is also literary—*and* scientific, the point being that there is no useful demarcation. The most obvious of the literary devices used in economic theory is the metaphor.[25] Economic theory uses metaphor not as an ornament but as an engine of analysis, especially in its most mathematical fields. Noneconomists find it easier to see the metaphors than do economists, habituated as the latter are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to the idea that of course production comes from a "function," and that of course business moves in "cycles." Certain of the metaphors are perfectly self-conscious, as revealed, for instance, by the exultation or irony with which the "invisible hand" is handled. And everyone understands that a metaphorical question is at issue when it is asked whether a mechanical or a biological analogue best suits the economy.[26] Some economists, again quite self-aware, make their contributions to the field by thinking metaphorically in ways that no one can mistake: Albert Hirschman, for instance, with his exits and voices; or J.K. Galbraith with his countervalences. But few recognize the metaphorical saturation of economic theories thought to be quite literal. Jacob Bronowski noted that the scientist needs "the exploration of likenesses; and this has sadly tiptoed out of the mechanical worlds of the positivists and the operationalists, and left them empty. . . . The symbol and the metaphor are as necessary to science as to poetry."[27] One might better say that even positivists and operationalists are tied to metaphor, the metaphor of "objectivity," for instance, and in any case, the metaphors of their discipline. Richard Rorty had it more right: "It is pictures rather than propositions, metaphors rather than statements, which determine most of our philosophical [and economic] convictions."[28]

To quantitative intellectuals, it is evident that the great intellectual achievement of the nineteenth century was physics; to literary intellectuals, it is equally evident that it was, the novel aside, linguistics. The styles of thought considered to be prestigious are determined by whether they adhere to one or the other of these two models of success—setting aside the miraculous discovery, late in the nineteenth century and more characteristic of the twentieth, of how things really were in the past, which came from the professionalization of history, or of how things are now and forever shall be, which came from the professionalization of social science. Both the quantitative and literary achievements were amazing, and one would not like to be forced to choose between them on grounds of comparative amazement. Thermodynamics and field theory are no less amazing than the decipherment of tongues long dead, the collection and comparison of hundreds of languages, and Saussure's reconstruction of the Indo-European vowels (confirmed—in a way as spectacular as Maxwell's equations were by Hertz's discovery of radio waves in 1885—by Hrozný's decipherment of Hittite in 1917). Some hu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

manists have forgotten, and most scientismists have never learned, the hard coming of literary culture. From Petrarch and Politian, Bessarion and Bentley, through the great philologists of the nineteenth century, the literary fields attracted the best minds and earned the most intellectual prestige, somewhat as particle physics and pure math do today.

Since Paul Samuelson's *Foundations of Economic Analysis* appeared in 1947, economics has looked to nineteenth-century physics for models. Perhaps it should try nineteenth-century linguistics. The notion was uppermost in the mind of the great founder of modern linguistics, Ferdinand de Saussure, who devoted many pages of his *Course in General Linguistics* to the analogy between economics and his new linguistics.[29] It is notable that another professor in Switzerland, someone as important for economics as Saussure was for linguistics, Leon Walras, flourished at the same time and had nearly identical ideas about the salience of what economists would call cross-sectional and comparative static thinking. The motto of both was, "Everything touches everything else, today." Saussure distinguished two approaches to society, the diachronic and the synchronic. The diachronic was the historical, dynamic, or, as statisticians would say, time-series approach typical of the linguistics of his day. It traced the history of words and grammar, showing how Latin *calidus* became by stages French *chaud*. But Saussure noted that a speaker of French in 1910 did not need to know any of this to communicate with other speakers: he needed to know only the system of oppositions and analogies extant in 1910 that allowed one to distinguish *chaud* from *froid*. A historical linguistics, in other words, interesting though it was in its own right, could shed no light on how people used language at any one time. What was needed was a synchronic linguistics, an ahistorical, static, cross-sectional account of how one Frenchman speaks to another. The two linguistics were unrelated and had to be: it would make no difference to the speaker if he had been left with "heiss" or "hot" instead of "chaud," so long as he could keep the opposition of the word for hot against *froid* (and against various other things, such as French for "lukewarm"). Synchronic and diachronic linguistics, in Saussure's view, had to be entirely separate sciences, one aligned along the "axis of successions," the other along the "axis of simultaneities." "For a science concerned with values," said Saussure, "the distinction is a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

practical necessity and sometimes an absolute one. In these fields scholars cannot organize their research rigorously without considering both co-ordinates and making a distinction between the system of values per se and the same values as they relate to time." And later: "The opposition between the two viewpoints, the synchronic and the diachronic, is absolute and allows no compromise."[30]

The point, which Saussure himself made quite clear,[31] is that classical and especially neo-classical and Austrian economics *are* synchronic. Indeed, they fit his recommendation for a fresh organization of the linguistic sciences so closely that one imagines that the economics of Karl Menger and William Stanley Jevons was the model. Both economics and synchronic linguistics are theories of value, that is to say, theories of psychological attitudes attached to things (whether lexical or woolen things, whether *chaud* the word or sweater/pullover the object). In economics, as in such a linguistics, the exact matching of material and person does not matter: it does not matter that a particular grain of wheat from the Kansas farm of George Hersh finds its way to the dinner table of David Mitch in Baltimore, no more than it matters that *chaud* rather than *heiss* represents in French the character of stoves that makes them painful for Baby to touch. What matters is that *a* grain gets off the farm and onto the table, or that there is *some* sign for hotness. Saussure's famous example of the 8:25 express from Geneva to Paris makes the point in a way that will elucidate it for economists.[32] He pointed out that "the" 8:25 is, for purposes of travel, "the" same train every day, even though it is never the same in physical makeup. The cars, the personnel, even the exact time of departure may vary (the last not very much in the Switzerland of Saussure's day), and most fundamentally of course, a car a day older is not the car it was yesterday. Yet the train *is* the same, defined by its opposition to other trains and its uses in the mental worlds of its passengers. In like fashion, the economics dominant in the English-speaking world is powerfully oriented away from such matters as the exact makeup of pairings in the marketplace or the origin of a particular product. It will not digest ideas of embodied labor, the history of institutions, the dependence of a particular demander on a particular supplier, or anything else along the axis of successions.

The comparison suggests why, during the history of economics, the various projects to make the subject dynamic, to bring it into real

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

time, to give it a historical perspective, to find out how much labor power is embodied in surplus value, have failed to deflect it from its static purity. Marxism, the German Historical School, Institutionalism new and old, all have been trying to graft diachronic limbs on a synchronic tree. The limbs keep falling off, to grow and flourish perhaps by themselves, but not as offshoots of the tree of analysis descended from Mandeville and Smith.

This does not mean that economic history is useless for economic studies as a whole, any more than historical linguistics is useless for linguistic studies as a whole. The same can be affirmed of the Marxist's political economy or the sociologist's history of institutions. The knowledge of economic history or economic politics or economic institutions is in this view the material for synchronic thinking. It becomes part of what the chemist and philosopher Michael Polanyi called the "tacit knowledge" about which the theorizing speaks. Synchronic theories such as neo-classical economics or Saussurean linguistics are suitable for mathematization. Polanyi wrote:

> A mathematical theory can be constructed only by relying on *prior* tacit knowing and can function as a theory only *within* an act of tacit knowing, which consists in our attending *from* it to the previously established experience on which it bears. Thus the ideal of a comprehensive mathematical theory of experience which would eliminate all tacit knowing is proved to be self-contradictory and logically unsound.[33]

That is to say, the chemist or economist must start with some attractive-looking gunk in a test tube or a story about how a particular economy has developed, with conceptions about which he has a tacit, experiential, linguistic *grasp*. The experience—in literary terms, the narrative (or in novelistic terms, perhaps, the dialogue)—is the phenomenon to be theorized about. One must have a direct grasp of the subject in order to have something to be synchronic about.

So much, then, for examples of literary thinking applied to economics. When confronted with the sentence "Economics is literary," however, only an economist would think first of applying it to the behavior of economists themselves or to the structure of economic theory. What occurs first and last to a noneconomist is that it could be used on the economy. Surely, here is an opportunity to get

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rid of that great stick of a character, Homo Economicus, and to replace him with somebody real, like Madame Bovary.

Perhaps. Economists have from time to time inquired at the psychology shop for premises of behavior richer than greed, but have found none to their liking. The experimental psychologists, in their own way even more madly scientismic than the economists, have stick figures of their own for sale, and few enough buyers. Other branches of psychology have nothing to say about the matter (cognitive psychology) or too much (Freudian and related psychologies). Perhaps departments of English or communications could set up as purveyors of behavioral assumptions—as they already have done, with commendable success, with the philosophy the departments of philosophy refuse to do.

Some literary critics have been bold enough to begin. An economist hearing someone talking about "human action" (as distinct from "mere motion" such as the tides have), attacking the behaviorist hallucination that man is a large rat, emphasizing the "purposeness" of human affairs, and bringing this together with a declaration that "the resultant of many disparate acts cannot itself be considered an act in the same purposive sense that characterizes each one of such acts (just as the movement of the stock market in its totality is not 'personal' in the sense of the myriad decisions made by each of the variously minded traders)"—an economist hearing all this would think himself in the presence of an Austrian economist: Hayek, say, or Ludwig von Mises, or some approximation *sui generis* such as Frank Knight. But he would in fact be in the presence of the doyen of American critics, Kenneth Burke.[34] The parallels between Burke's thinking and Austrian economics are remarkable—the more so since their politics otherwise do not appear to match—although there are no apparent channels of mutual influence.

Whether literary thinking will shed light directly on economic behavior is an open question. Some anthropologists think in a literary fashion about all manner of behavior, part of it economic. But the way from these to the lovely paradoxes of aggregation, theorems of welfare, and equations of demand and supply that make economics so unique and successful as a social science is not clear. That is a problem for another time.

What I am sure of is that, as Thomas Kuhn once said, "we have only begun to discover the benefit of seeing science and art as one."[35]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The main benefit will be the return to a lost impulse in our civilization, last seen wandering off with Leonardo, the impulse not merely to combine the two, which are today considered as distinct, but, as Kuhn says, to see that they are *not* distinct. He warns that seeing both together can be overdone, but the warning is unpersuasive. An unpersuasiveness in this demarcation is widespread. When novelist John Gardner tries to put some distance between science and art in his otherwise persuasive *On Moral Fiction,*[36] he misunderstands science as something mechanical and objective. When Steven Weinberg, at the beginning and end of a very persuasive treatment of "Beautiful Theories," tries to do the same, he mixes up the beauty felt by the poet (which is indistinguishable from the sense of beauty felt by the poet of nature, the physicist) with the beauty felt by the nonpoet reader of the text. When literary critic Gerald Bruns tries in some characteristically persuasive talk to distinguish the study of literature from the study of nature or society, and remarks that literature resists our theories of meanings, he forgets that nature and society are texts that are just as resistant. Even very cultivated scientists and litterateurs treat science and art as two disjunctive ways of seeing, recommending, then, a sort of binocular vision in their pairing.

A rhetoric of science, however, shows how similar the arguments are, whether stories or analogies or appeals to authority. The special topics of economics differ from those of literature, to be sure, but even they can be broken down into atoms of argument interchangeable among fields. And the general topics are identical, used in differing proportion as the particular case may demand. We are all talkers, hardwired, perhaps, for such and such a transformational grammar, softwared, surely, by our cultures in specific and general ways. Scholars are talkers, too. A field of thought is special, after all, not because it has a certain Methodology—for these dissolve into tropes common to all persuasion—but because the conversation has a special subject, such as medieval economic arrangements or Latin poetry books, and because the conversation today, after what has gone before, has reached the point that it has.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ENDNOTES

The essay was first delivered as a talk to the Social Science Seminar at the Institute for Advanced Study in Princeton in November 1983. Seminars at the University of Virginia and Union College in Schenectady have listened patiently to versions of it, as did the Iowa Symposium on the Rhetoric of the Human Sciences, in March 1984. I would like to thank the Institute for Advanced Study, the John Simon Guggenheim Foundation, and the Program in Humanities, Science and Technology of the National Endowment for the Humanities for support. The essay is part of a forthcoming book, *The Rhetoric of Economics.*

[1]Kelvin, *Popular Lectures and Addresses,* vol. 1 (London: 1889-91), p. 73.

[2]I rely for these assertions on Dominique Schnapper, Wolf Lepenies, and Albert Hirschman. Janos Kornai, Giovanni Levi, Teofilo Ruiz, and Axel Leijonhufvud assure me that the same can be said of Hungarian, Italian, Spanish, and Swedish. The word "science" began to be used in the honorific sense in English only in the nineteenth century. The earliest citation in sense 5b of the *Oxford English Dictionary* (the *Supplement* describes it now of course as "the dominant sense in ordinary use") is 1867, W.G. Ward in the *Dublin Review* for April, p. 255n: "We shall . . . use the word 'science' in the sense which Englishmen so commonly give to it; as expressing physical and experimental science, to the exclusion of theological and metaphysical." Earlier it meant "studies," as in "classical studies"—*Altertumswissenschaft,* in German. One cannot in English imagine "classical science." The Wildhagen/Héraucourt German dictionary (1972) gives *die klassiche Wissenschaft* as "humanities" (clearly, in the older sense of the English word) and *die philologisch-historische Wissenschaften* as "arts" (in the British academic usage, as against, again, "science").

[3]"Beautiful Theories," revision of the Second Annual Gordon Mills Lecture on Science and the Humanities at the University of Texas, April 5, 1983, p. 20. From 1967 to 1971 his theory was considered too ugly to test. He points out that no one would have financed the British expedition to the South Seas in 1919 to test Einstein's theory had it been ugly.

[4]Burke, *The Rhetoric of Motives* (Berkeley: University of California Press, 1969), p. 58.

[5]Cf. James Willis, *Latin Textual Criticism* (Champaign, Ill.: University of Illinois Press, 1972), p. 24 on stemmatic theory, and p. 42 on the theory of errors. Anyone who believes that the study of literature leads to a softening of the mind and mettle should be made to read this book, supplemented by L.D. Reynolds and N.G. Wilson, *Scribes and Scholars: A Guide to the Transmission of Greek and Latin Literature,* 2d ed. (Oxford: Oxford University Press, 1974), and A.E. Housman, "The Application of Thought to Textual Criticism," in *Selected Prose,* edited by J. Carter (Cambridge: Cambridge University Press, 1961). The height of this sort of thing is John G. Griffith, "A Taxonomic Study of the Manuscript Tradition of Juvenal," *Museum Helveticum* 25 (1968): 101-38.

[6]Booth, *Modern Dogma and the Rhetoric of Assent* (Chicago: University of Chicago Press, 1974), p. 103.

[7]Ibid., p. 13.

[8]Richard Rorty, *The Consequences of Pragmatism* (Minneapolis: University of Minnesota Press). The arrival of intellectuals fleeing interwar Europe in fields as varied as philosophy and architecture killed off characteristically American, Midwestern, and milder versions of modernism in favor of a harsher European type.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[9]It is hard to disbelieve the dominance of modernism in economics, but an objective, quantitative test would of course make it, or any assertion, more believable. A proper sampling of referee reports of the *American Economic Review* would be a good test, watching out for the use of the modernist ukase ("Never ask business people what they are doing: they cannot tell the truth"; "Measure things regardless").

[10]I am indebted to Thomas McCaleb of Florida State University for letting me use this document. His "Capsule Contributions of Nobel Prize Winners in Economics" (example: "Paul Samuelson, 1970: Men are molecules and economics is thermodynamics") is hard to imagine in physics, mathematics, or other fields more sure of their methodological ground.

[11]Thomas Kuhn, *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago: University of Chicago Press, 1977), p. 184.

[12]Marleen Boudreau Flory, "Semantics and Symbioses: How to Write an Article to Impress Your Peers," *Chronicle of Higher Education,* January 26, 1983.

[13]Habermas, *Legitimation Crisis* (1973; in translation, Boston: Beacon Press, 1975), p. 110.

[14]This talk of conversation as a description of intellectual life comes, of course, from Rorty (*The Consequences of Pragmatism*, pp. 165, 172; *Philosophy and the Mirror of Nature* [Princeton: Princeton University Press, 1979], pp. 163, 170, 318, 371, etc.), and from Polanyi (*Knowing and Being* [Chicago: University of Chicago Press, 1969], p. 84f and elsewhere), and Habermas as cited.

[15]Paul Feyerabend, *Against Method: Outline of an Anarchistic Theory of Knowledge* (London: Verso, 1978); Rorty, *The Consequences of Pragmatism;* and for economics, Donald McCloskey, "The Rhetoric of Economics," *Journal of Economic Literature* 21 (June 1983): 481-517. Husain Sarkar's *A Theory of Method* (Berkeley: University of California Press, 1983) is a sophisticated defense of Methodology, which nonetheless argues against adopting a uniform one. A similar pluralism in a pro-Methodological work in economics appears in Bruce Caldwell's *Beyond Positivism: Economic Methodology in the Twentieth Century* (London: Allen and Unwin, 1982).

[16]J.A. Schuster, "The Developmental and Structural Demystification of Descartes' Method," unpublished paper, Department of History of Science, University of Wollongong, Australia, 1983.

[17]Gerald Geison, of Princeton University, is writing a book on Pasteur that illustrates the lamentable humanness of even a great scientist. Support for this unsurprising proposition comes from an impeccable source, T.H. Huxley, in *Modern Rhetoric,* edited by Cleanth Brooks and Robert Penn Warren (Harcourt, Brace, 1949), p. 559: "To hear all these large words you would think that the mind of a man of science must be constituted differently from that of his fellow men; but if you will not be frightened by terms, you will discover that all these terrible apparatus[es] are being used by yourselves every day and every hour of your lives."

[18]Cf. a book on Uri-Gellerish spoonbending, Harry M. Collins and T.J. Pinch, *Frames of Meaning: The Social Construction of Extraordinary Science* (London: Routledge and Kegan Paul, 1982). One can understand and even sympathize with the fixation on the Demarcation Problem among the older generation of observers of science, especially Europeans, and most especially Central Europeans. Axel Leijonhufvud, an economist who, in collaboration with Earlene Craver, has interviewed many of the Austro-Hungarian economists of the pe-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

riod, interprets it as a reaction to interwar irrationalism, a candle of clarity in the storm. The candle, to be sure, was lit rather earlier: the Kelvin quote above is one of many that could be assembled from the nineteenth century declaring Science to be epistemologically special. But it cannot be denied, as the point has been put to me, that a Demarcation has great and good uses in political circumstances threatening to free inquiry. The local apparatchik thinks he can see what is wrong in an analogy or an introspection but does not know how to contradict a syllogism or a statistic. But the political problems of Austrians in the 1930s or Russians in the 1980s are not ours.

[19]See Charles Bazerman, "What Written Knowledge Does: Three Examples of Academic Discourse," *Philosophy of the Social Sciences* 11 (September 1981): 361-87; Bazerman, "Early Developments in Argumentation in Physics," unpublished paper, English Department, Baruch College, CUNY, n.d.; Bazerman, "Modern Evolution of the Experimental Report in Physics: Spectroscopic Articles in *Physical Review,* 1893-1980," forthcoming, *Social Studies of Science.* I have attempted some of this for economics: "The Character of Argument in Modern Economics: How Myth Persuades," in *Argument in Transition,* edited by D. Zarefsky, M.O. Sillars, and J. Rhodes (Annandale, Va.: Speech Communication Association, 1983), pp. 170-87 and an unpublished piece, "The Problem of Audience in Historical Economics: Rhetorical Thoughts on a Text by Robert Fogel."

[20]Raymond C. Battaglio et al., "Commodity Choice Behavior with Pigeons as Subjects," *Journal of Political Economy* 84 (February 1981): 116-51; Charles Plott of the California Institute of Technology has an experiment on humans that falsifies the Law of Demand.

[21]Booth, *Modern Dogma,* p. 186.

[22]Official econometric method is under attack these days and will not survive unchanged. Statistical significance, for instance, is looking less and less viable. This does not mean that economics will or should become nonquantitative. Cf. Edward E. Leamer, *Specification Searches* (New York: Wiley, 1978), Leamer, "Let's Take the Con Out of Econometrics," *American Economic Review,* 73 (March 1983): 31-43; and Donald McCloskey, "The Higher the Fewer: The Incomplete Rhetoric of Quantification in Economics and History" (unpublished manuscript), January 1984. A devastating criticism of classical statistical procedures has been made by Frank T. Denton, "Econometric Data Mining as an Industry" (McMaster University, October 1983). He points out that, even if each investigator rigorously follows the classical rule against data mining in search of significant nuggets, a group of such investigators gathered around the same vein of data will in time as a group produce results as meaningless as those from the most cynical individual miner of data. It is not hard to believe that the time has been reached with the Michigan tape or with the American quarterly national income statistics since the war.

[23]Booth, *Modern Dogma,* p. 86.

[24]Medawar, "Is the Scientific Paper Fraudulent?" *Saturday Review,* August 1, 1964, pp. 42-43.

[25]I treat this at greater length in "The Rhetoric of Economics," esp. pp. 502-8.

[26]See the works of Boulding and Georgescu-Roegen. An interesting paper by Janos Kornai explores "The Health of Nations: Reflections on the Analogy Between the Medical Sciences and Economics," *Kyklos* 36 (fasc. 2, 1983): 191-212.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[27]*Science and Human Values*, rev. ed. (New York: Harper Torchbook, 1965), p. 36.
[28]Richard Rorty, *Philosophy and the Mirror of Nature*, p. 12.
[29]Published posthumously in France in 1915, translated in 1959, and reprinted in 1966 (New York: McGraw-Hill), pp. 79ff and 115ff.
[30]Ibid., pp. 80, 83.
[31]Ibid., p. 79.
[32]Ibid., p. 151.
[33]Polanyi, *The Tacit Dimension* (New York: Doubleday, 1966), p. 21.
[34]See his article "Interaction: Dramatism" in *International Encyclopedia of the Social Sciences*, p. 47.
[35]Kuhn, *The Essential Tension*, p. 343.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Alan Brinkley

Writing the History of Contemporary America: Dilemmas and Challenges

In December 1982, the journal *Reviews in American History* marked its tenth anniversary by publishing a special issue devoted to the present state of American historical scholarship.[1] Some of its twenty essays examined particular chronological fields: the Jacksonian era, Reconstruction, the New South, the Progressive era; others discussed broad subdisciplines such as family history, legal history, intellectual history, medical history; still others discussed particular issues that have generated significant controversies in recent years.

Any such survey will inevitably neglect certain areas of scholarship in favor of others. But what is particularly striking about this collection, indeed, about most other assessments of modern historiography, is the almost complete absence of attention to the study of twentieth-century America. Except for discussions of the Progressive era (which has generated a serious and extensive literature) and of diplomatic history (which has tended to remain isolated within its own discrete realm),[2] the historiography of modern America, and particularly of the period since the end of World War I, has attracted little attention from, and generated little excitement among, the historical profession at large.

The reason is not simply prejudice or myopia. There are no longer many scholars who define as "history" only events occurring before 1914. The larger reason is the state of the field itself. The study of twentieth-century America has not displayed the interpretive depth or methodological sophistication that has characterized the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

study of earlier eras in recent years; it has attracted the attention of relatively few younger scholars and of particularly small numbers of historians attracted to the newer approaches and theories that have revolutionized the discipline.

The historiography of modern America has, instead, consisted disproportionately of biographies, political narratives, and policy studies. It has produced exhaustive accounts of events that were of central importance to contemporaries (the New Deal, the Cold War, McCarthyism), but it has examined those events largely in the terms contemporaries debated them. It has become a field increasingly divorced from the main currents of the discipline, fascinated with personalities, shaped by contemporary concerns, mired more in political than in scholarly debates. It has produced some major historians and some great works, but it has not often produced questions or controversies capable of connecting it with the larger world of historical scholarship. Why that should be so is not an easy question to answer, but it is a question that should concern those committed to the study of modern America, as well as those who believe that an understanding of the twentieth century is at least as important as the understanding of any other historical era.

Some of the most obvious explanations are also among the most important. The professional study of history began in America in the late nineteenth century, and it attracted scholars and generated literature for nearly fifty years before historians started to turn in a serious way to the study of the twentieth century. History is a cumulative discipline, each generation of scholars learning from, and building upon, the work of its predecessors. What scholarship there is on the modern era has evolved in the space of roughly forty years, and it should not be surprising that historians have been unable in that time to develop the field as far as they have advanced others with four or five generations of literature to draw from.

Historians of the twentieth century must cope as well with the immediacy of the past they are attempting to study. They face the special difficulty of achieving detachment from subjects still within living memory. And they must reconcile themselves to the virtual impossibility of studying their period within the context of a broad continuum, what French social historians term the *longue durée*. The impact of great ecological, climatic, and demographic changes on

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

human society, changes scarcely apparent to contemporaries but visible to historians able to view society over the span of several centuries, has come to form the heart of much medieval and early modern historiography; those changes are difficult to assess, at times impossible even to detect, for a period so recent.

The study of twentieth-century America is fundamentally different from the study of earlier periods for another reason as well: the nature and quantity of source material. Historians of other eras must often reconstruct the past on the basis of limited evidence; scholars of the modern period must deal with an accumulation of sources so vast and so difficult to assimilate that the prospect of tackling large subjects and long spans of time can seem forbidding. The proliferation of government documents; the expansion of census materials; the increasing commitment to record-keeping in all areas of modern life; the technological advances that make such record-keeping possible; the creation of innumerable libraries competing for manuscripts and documents and often preserving collections that might otherwise have been allowed to vanish: all have proved in some ways a boon to the study of the twentieth century, opening possibilities that must forever remain closed for earlier periods. But these same developments have often proved paralyzing to the growth of scholarship, encouraging scholars to define their studies narrowly so as to avoid becoming overwhelmed by their sources.

The proliferation of sources, however, is only a by-product of a much larger force shaping the study of the twentieth century: the extraordinary complexity of events and rapidity of change that distinguish the modern world from all those before it. As one chronicler of recent American history commented several years ago:

> Once, the essential circumstances and assumptions of life changed so slowly that one could speak of many generations living and dying in the same age. Now, events, non-events, fashions, and moods succeed one another so rapidly that an age can be over in half the length of a biological generation.[3]

It is little wonder, perhaps, that historians of modern America have had difficulty seeing the era clear or seeing it whole, that they have been tempted to focus on individual lives and discrete events and have shied from large generalizations and broad themes. And yet, at the same time, the interconnectedness of twentieth-century American society has made it all the more essential that historians look be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

yond isolated events and individual lives for the larger patterns that give the era meaning.

This paradox—the particular difficulties of taking a broad, synthetic view of twentieth-century society, combined with the particular importance of doing so—helps to explain, perhaps, why some of the most important new forces in historical scholarship have had difficulty in taking root among students of the modern era.

The single greatest change in the writing of history in the past two decades has been the engagement of scholars with the lives of ordinary men and women and with the social and economic forces that control those lives. This new social history emerged in part because new techniques, borrowed from the social sciences, made it possible for scholars to examine elements of the past that had previously eluded them. But it emerged, as well, as a reaction against the traditional emphasis on great public events, on rulers and governments, on wars and revolutions. Nearly two generations of historians have now come of age imbued with the doctrines first enunciated by the French social historians of the *Annales* school (Fernand Braudel, Lucien Febvre, Marc Bloch, Leroy Ladurie, and others), who questioned the importance of "*événements,*" public events, and called instead for an analysis of the deeper social structures that govern the normal life of society. "Events are the ephemera of history," Braudel proclaimed in his classic work, *The Mediterranean and the Mediterranean World in the Age of Philip II,* ". . . they pass across its stage like fireflies, hardly glimpsed before they settle back into darkness and as often as not into oblivion."[4]

Social historians, in turning away from public history, have opened vast new areas of human experience for historical study. Relatively little of the new social history, however, has focused on the twentieth century. One reason, perhaps, is the difficulty of studying social change in an era in which change is so rapid and for which sources are so vast. But another reason may be the inability of social historians to confront the increased importance of public, political events in realms of human existence previously isolated from those events. However appropriate it might be to study earlier centuries by isolating social structures from political developments, by looking at communities in isolation from the larger, public world, it is virtually impossible to do so in the twentieth century. In the mod-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ern era, public events are not ephemera; they are often among the central realities of everyday life. No individual, no community in modern America, can live an isolated, unbroken life, insulated from the behavior of the state or national economic institutions. Twentieth-century wars and revolutions, even though they have occurred far from the United States, have directly affected the fortunes of every level of society.[5]

In the highly politicized, interdependent world of the twentieth century, social history is, almost by definition, also political history; but neither social historians nor the political historians who have dominated twentieth-century historiography have managed to find ways to bridge the enormous gulf that has come to separate their fields.

Political historians have watched with some dismay as their subdiscipline has faded from prominence within the profession, swamped by the rising tide of social history; and some have made their own effort to adapt the social sciences to the study of politics. The "new political history," which began to flourish in the early 1960s and which seemed for a time to be sweeping all before it, borrowed the social historians' disdain for the old preoccupation with presidents and statesmen and turned instead to the study of the political behavior of the larger public. Thomas C. Cochran, in 1948, was among the first to call on political historians to turn away from the "presidential synthesis," to use statistical and other social scientific techniques, to focus not on national events but on political behavior at the state and local levels.[6] Nearly two generations of quantitative studies have emerged in response to this call, most of them accepting the premise that political history is less the story of leaders than the story of ordinary people expressing their social, economic, and ideological concerns through politics.

The new political history has helped to revolutionize the study of nineteenth-century American public life. Perhaps no single work of the last twenty-five years has more thoroughly transformed scholarship in its field than Lee Benson's quantitative study of electoral behavior in New York in the Jacksonian era, a study that called into question some of the most basic assumptions of traditional political historians about the nature of "Jacksonian democracy."[7] Other practitioners of the new political history—Michael Holt, Sheldon Hackney, J. Morgan Kousser, to name but a few—have

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

helped reshape traditional interpretations of the crisis of the second party system in the 1850s, populism, progressivism, and the New South.[8] But as with the new social history, the new political history has not yet had a major impact on the study of the twentieth century (or at least on the years since the First World War), and for similar reasons.

Among the premises of the new political history is that electoral behavior at the local level is a reliable and important expression of the most basic impulses of voters, an avenue to an understanding of the role of ethnicity, class, race, and religion in defining individual identities and in shaping the social and political structure. For much of American history, that premise had considerable validity. Partisanship and political participation through the last seventy years of the nineteenth century and the first decade or so of the twentieth were central to American life (even though political *institutions* in those years remained relatively weak and unimportant). Nearly 80 percent of all eligible voters participated on average in presidential elections in the four decades between 1860 and 1900; approximately two thirds of all eligible voters participated in off-year or local elections. Campaigns were not simply political contests; they were major cultural events. Partisanship was not simply an expression of political ideology; it was a major form of social self-definition.[9]

In the twentieth century, however, although the importance of the state has greatly expanded, political participation has receded both in extent and in importance. Richard L. McCormick has recently shown, for example, that by the turn of the century, partisan identification in New York State was fading in importance and was being replaced as the central focus of public life by interest group identification. Voter turnout was declining. Party control of political institutions was under assault.[10] Those trends, needless to say, have continued and accelerated during the twentieth century, particularly since the introduction of radio and, later, television to politics. At the same time, local governments and local politics have so faded in importance that they have often been virtually ignored by the majority of potential voters. Those changes have raised several serious challenges to many of the premises of the new political history.

Voter behavior and party alignments are, of course, important in their own right, and there have been significant and influential stud-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ies of twentieth-century voting patterns.[11] But the study of electoral behavior, party alignments, and critical elections in the modern era, a time when voting and partisanship have so declined in their importance to the lives of most Americans, seems unlikely to support the broad generalizations about society and culture that it has occasionally done for the nineteenth century.

The injunction of the new political historians to turn away from the study of the federal government and toward the study of electoral behavior was an appropriate one, perhaps, for the nineteenth century; but for the twentieth, a time when the role of the state has expanded dramatically and popular politics has become increasingly remote to the lives of ordinary men and women, that injunction seems precisely to reverse the appropriate priorities.

Another area of scholarship whose impact on the study of the twentieth century has been relatively limited has been the historical literature shaped by Marxist theory. The new radical history emerged with great force in the 1960s, in response in part to the emergence of a newly vigorous political Left in America and, perhaps more directly, in response to the enormous influence of British labor historians (most prominently E.P. Thompson) on their American counterparts.[12] Although radical scholarship makes use of many of the techniques of the social scientists, its governing assumptions are less purely empirical and its aims are more broadly synthetic. Marxist historians reject the assumption of many social scientists that individual elements of the past must be examined and tested before broad generalizations can emerge; radical scholars begin with a fully developed theory of historical development, and even in their most narrowly focused studies, they work to advance a preexisting and comprehensive synthesis.[13]

Some of the most powerful and most influential historical writing of the last twenty years has emerged from scholars on the left, most notably their highly sophisticated and brilliantly documented portraits of the Old South and slavery and their impressive studies of the emerging industrial working class in mid- and late-nineteenth-century America.[14] But like the work of the social scientists, radical scholarship has had relatively little impact on the writing of twentieth-century history (with the single exception of diplomatic history, where revisionists from the left have revolutionized, even if they no longer dominate, the scholarship on the Cold War).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Radical historians have made some important forays into the twentieth century. Gabriel Kolko and others have produced provocative and influential reinterpretations of progressivism, but the Marxist critique is not now at the center of the scholarship on that controversial era.[15] The late 1960s saw the tentative beginnings of a New Left reinterpretation of the New Deal, but the radical critique never developed beyond a few suggestive essays.[16] A number of important works in labor history by such scholars as Nelson Lichtenstein, Roy Rosenzweig, Ronald Schatz, and Peter Friedlander (most of them influenced directly or indirectly not only by E.P. Thompson, but by the work of Herbert Gutman and David Montgomery, the dominant figures in American labor history) have made the study of the twentieth-century working class among the most sophisticated and challenging areas in the field.[17] Most recently, radical theory has helped to shape a provocative effort to find a new central theme for twentieth-century social development: an analysis of the modern era (emerging in large part from American Studies scholars at Yale) emphasizing the emergence of a pervasive culture of consumption. Consumerism, these historians argue, has been the central shaping force of twentieth-century life and has served, both directly and indirectly, to co-opt dissent and to advance the hegemonic interests of dominant elites.[18]

Despite these and other important contributions, the amount of radical scholarship in the field is still limited, both in quantity and in scope, and it would be difficult to argue that the New Left has yet introduced a credible conceptual scheme for the study of twentieth-century America as a whole. One reason has been the apparent preference of radical historians for the nineteenth century, where the strains of early industrialization seem somehow purer, the origins of the American working class are more apparent, and the transitions and transformations that Thompson and others have introduced into scholarly discourse are more easily identifiable. But the absence of much serious study by the New Left of the twentieth century is a result, as well, of the particular problems the modern era presents.

Two examples may serve to suggest the difficulties. The bourgeois state, in the New Left synthesis, serves largely as an agent (whether consciously or unwittingly) of the corporate system. But whatever explanatory power this approach might retain for nineteenth-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

century politics, the state in twentieth-century America has grown to the point where its goals and behaviors cannot be so simply categorized. Modern government has developed significant interests of its own; its impact on society is often determined as much by bureaucratic imperatives as by conscious intentions; no class and no interest group can claim control over the state's own inner logic and internal needs.

Similarly, the American working class, by virtue of its organizing battles in the 1930s and 1940s, has created a political structure for itself—the modern trade union movement—that for better or worse has become central to workers' lives. Labor historians cannot dismiss the story of modern unions, as they have often dismissed the story of their nineteenth-century counterparts, as outmoded "institutional history" largely irrelevant to the central experiences of ordinary workers. And yet, the modern history of trade unions does not fit clearly or comfortably into a class-based model of society. Like twentieth-century government, twentieth-century unions have become bureaucracies with their own internal imperatives.

How, then, have historians approached the task of interpreting twentieth-century America? Even in the absence of very much of the "new" scholarship, books, articles, and dissertations continue to be written; courses continue to be taught; the field remains, if not always vibrant, very much alive. And it does not live in an interpretive vacuum.

Most of the seminal work in the field of twentieth-century history has come from two broad and not unrelated conceptual frameworks: the so-called consensus school, which emerged in the aftermath of World War II, and the more recent "organizational synthesis," which first became visible in the 1960s. Both have been important in giving the field whatever analytical sophistication it has and both have been important in narrowing its scope.

The "consensus" historians, as one large and highly diverse group of scholars has come to be known, rose to prominence in the early 1950s by challenging some of the reigning "progressive" assumptions of the previous three decades. The progressive historians (Charles Beard, Frederick Jackson Turner, Arthur M. Schlesinger, Sr., and others) had portrayed conflict as the central theme of American history; the struggle between the "people" and the "interests,"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

or between the West and the East, had shaped national life and advanced American democracy.[19] The consensus scholars argued that what had characterized the American past was not conflict, but a pervasive agreement: a broad commitment throughout most of American society to the values and institutions of democratic capitalism.

There was, in their view, no essential difference between the ideologies of the different regions of the United States; the South and the West were as committed to capitalism as the North. Nor were there important ideological differences separating classes; workers and capitalists alike aspired to entrepreneurial success, and what potential there was for conflict between them over access to that success was largely dissipated by the widespread opportunities for social mobility. American society was complex and diverse, but this broad consensus on fundamental issues made possible a reasonably stable pluralism that prevented conflict from becoming fundamental or destructive.[20]

Consensus history has been much attacked by the Left as an effort simply to validate capitalism and to delegitimize challenges to it; and it is true that some of the scholars most prominently identified with this synthesis (most notably Daniel Boorstin) have written in open celebration of American values and institutions.[21] But many of the best consensus scholars have seen their approach as one that provided a powerful critique of American society. Few more pessimistic pictures of American public life have emerged, for example, than Richard Hofstadter's *The American Political Tradition,* which described the shared assumptions that had dominated American politics during its first two centuries in almost wholly negative terms, as nothing more than a commitment to economic self-aggrandizement by a constantly grasping, opportunistic middle class. Even Hofstadter's less gloomy portrait of twentieth-century politics—his influential 1955 study, *The Age of Reform*—portrayed a deeply flawed liberal tradition resting on inchoate anxieties and operating through symbolic rather than substantive measures.[22]

The consensus school, in short, did not banish criticism from American historiography; on the contrary, it was in many ways a far more skeptical approach than the progressive view that preceded it. It rested on deep doubts about human nature (derived in large part from the horrors of Stalinism, the Holocaust, and the war), and it

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

displayed a diminished faith in the inevitability of progress. Nor was consensus historiography as simple or one-dimensional as much of the scholarship that had come before it. It produced the first body of historical literature to make serious use of techniques borrowed from psychology, sociology, and other social sciences; and it introduced a new complexity and ambiguity, even a tragic quality, to historical explanation.

At its best, then, consensus history was a two-edged approach, combining a serious critique of American institutions and values with a sober recognition of both the limits of human capabilities and the possibilities for the creation of far worse social systems. And at their best, the consensus scholars produced some of the greatest and most influential works in American historical literature. But when historians came to apply this approach to the twentieth century, as they did with great force beginning in the early 1950s, they tended to do so in a sharply constricted way. They generally minimized the critical aspects of the interpretation and emphasized instead its capacity to illuminate the superiority of the American system and the danger of the alternatives.

The shift in focus was probably inevitable. Nothing was more powerful in shaping the intellectual climate of the 1950s and 1960s than the fear of totalitarianism. American scholars, like most other Americans during the Cold War, were deeply committed to the defense of Western notions of liberty and individualism in the face of the ominous threats to those traditions that had emerged in the twentieth century from both the Right and the Left. And it should not be surprising, perhaps, that those historians engaged in the study of the contemporary world would bring such concerns to bear on their scholarship that it would reflect their own commitment to validating the centrist liberalism they had come so fervently to embrace.

Consensus historiography dominated the study of twentieth-century history for more than twenty years, and produced a number of subtle, skeptical interpretations of modern issues, illuminating the frailties and failures of liberals as well as the deficiencies of their opponents.[23] But the thrust of most consensus scholarship on twentieth-century America was a broad approval of the modern liberal tradition and a repudiation of challenges to it, a defense of what Arthur Schlesinger, Jr., christened, in an influential 1949 book, the "vital center."[24] The early promise of consensus historiography as a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

vehicle for serious critical examination of the American past faded; and what came to dominate the scholarship on the modern era was a vaguely normative stance, through which scholarship came increasingly to reflect present political needs.

The grip of this narrowed consensus approach on twentieth-century historiography created many problems. But among the most significant was that it left little space for serious analysis of those groups and those movements that did not share the values of the "vital center" and that occasionally raised important challenges to it. Even the best consensus historians appeared to stumble when called upon to explain such phenomena as populism, religious fundamentalism, Southern radicalism, or McCarthyism. Basic dissent, they seemed to argue, could have no entirely rational basis; it must rest, instead, on misdirected anxieties and prejudices, on myths and symbols, on ignorance and bigotry. Large areas of modern American experience came, as a result, to be excluded from serious analysis. And in the end, the consensus school, which so deepened our understanding of earlier eras, served in many respects to narrow the scholarly approaches to twentieth-century America.

Beginning early in the 1960s, another approach to the study of twentieth-century America began to emerge, one that did not so much challenge the premises of consensus historiography as raise a different set of questions. Like consensus scholarship, this newer approach is highly diverse and difficult to categorize in simple terms, but its leading practitioners have come to describe it as an "organizational synthesis" of American history. Drawing heavily from Weberian sociology and from modernization theory, organizational historians stress not the struggle between liberal and conservative forces and not the existence of a shared ideology (although they do not necessarily deny the existence of either), but the importance of new forms of social and, above all, bureaucratic organization. To them, the central forces shaping modern society have been the decline of informal, personal authority and local autonomy, the rise of large-scale, highly bureaucratic national institutions (both public and private), and the redefinition of roles and specialization of tasks that modern organizations require. As Louis Galambos, one of the most skillful and influential practitioners of this new history, has argued,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

twentieth-century America's "rendezvous was not with the liberal's good society. It was with bureaucracy."[25]

The organizational approach, although scarcely two decades old, has already produced a large and impressive literature. Seminal work by Alfred D. Chandler, Jr., has led to a sophisticated examination of the rise of modern forms of corporate organizations and their impact on the American economy.[26] Political historians have used the organizational approach to reinterpret the relationship between the corporate world and the twentieth-century state; Ellis Hawley, Robert Cuff, Thomas McCraw, and others have challenged the progressive idea that business and government have been in constant conflict and have shown how the bureaucracies of the corporate world and the political world formed patterns of association and accommodation, producing a pervasive "corporate liberalism" congenial to both.[27] Diplomatic historians influenced by the organizational approach have demonstrated how policy-making cannot be explained simply in terms of rational calculations by leaders of the national interest; political and bureaucratic forces generated by the modern institutions of the state have played at least as large a role in shaping decisions. And Robert Wiebe, Samuel Hays, and others have broadened the organizational approach into a sweeping interpretation of modern society as a whole. The central theme of twentieth-century history, Robert Wiebe argued in his influential synthesis, *The Search for Order,* has been the decline of the autonomous community and the rise of new forms of national bureaucratic organization serving the interests of a "new middle class."[28]

The organizational synthesis has brought to the study of twentieth-century America something no other approach has provided: a recognition of the essential differences between the modern era and those preceding it. The scale and complexity of twentieth-century institutions and the pervasiveness of their influence at every level of society have added, these scholars argue, a new dynamic to the contemporary world. The modern state, they claim, cannot be viewed simply as the agent of one or another class or interest group; its own bureaucratic needs shape its behavior and its effects as much as the intentions of politicians. The modern corporation is not simply an expression of the goals of individual capitalists; it is an organism with its own autonomous life, an institution over which no individual can ever exert total control. And individuals in twentieth-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

century America, the organizational theorists claim, live in a world increasingly impervious to their influence; patterns of behavior and lines of authority have come to be shaped less by individual will than by bureaucratic imperatives.

Organizational historians claim that theirs is an intrinsically value-neutral interpretation, one that dictates no single ideological stand on the desirability and the moral implications of the processes they describe. But there is about their description of the modern world an unmistakable aura of inevitability, a sense that, in its broad outlines at least, what has happened is what had to happen. And there is, therefore, in much organizational history a subtle version of the same normative view of protest, dissent, and alternative visions that characterizes consensus history. Agrarian radicals, fundamentalists, militant minorities, and others who have opposed the centralizing tendencies of modern society may not be the "paranoid" sociopaths that consensus historians at times described. But they are, in the organizational view, essentially irrelevant, clinging to a vision of society doomed to obsolescence by the relentless march of history.

The organizational school has made important contributions to our understanding of the phenomena that are at the heart of its own concerns, but it is chiefly useful in revealing the working of the nation's center, of its dominant institutions, its most powerful and influential classes. It consigns the experiences of vast segments of society to the periphery of historical analysis and, in the end, leaves incomplete our view of modern America.

The two principal efforts to provide a workable and comprehensive synthesis of twentieth-century American history have left much of the modern experience unexplained. They have brought clarity and sophistication to some areas of scholarship, but have narrowed the scope of others. And they have left historians of twentieth-century America still in search of questions and approaches that will add depth and complexity to our understanding of the modern era. No single approach, of course, is likely to answer all the hopes or needs of scholars in the field. But there are several broad assumptions about twentieth-century life that historians might choose to question as they search for new interpretive directions.

Twentieth-century scholars might, first, ask some questions about one of the powerful assumptions behind most approaches to mod-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ern history: the belief that the contemporary era is characterized above all by the nationalization of American society. The search for the forces that have bound America together, that have mediated diversity and promoted unity, has been the central concern of scholars of many different perspectives. Consensus scholars point to the rising power of a common ideology; organizational scholars cite the pervasive influence of national institutions; and radical scholars cite the oppressive or hegemonic influence of dominant classes.

Opinions differ, of course, as to the costs and benefits of this process of nationalization, but relatively few scholars have doubted the existence or importance of the process. And to a large degree, of course, they have been correct. The centralization and homogenization of society have indeed been central phenomena of twentieth-century life. But there is an equally important phenomenon of modern American history that scholars have tended not to emphasize: the striking persistence, in the face of these powerful homogenizing forces, of disunity, differences, divisions.[29] Some such forces are immediately obvious: race, ethnicity, class, religion, gender. But the persistence of disunity is visible as well even in areas of American life that have often seemed most clearly to confirm the rising influence of nationalism.

The story of the American economy in the twentieth century, for example, is most often described in terms of the increasing size and strength of great corporate institutions, in terms of the relentless march of centralization and consolidation. But there is another, equally important story that leads to somewhat different conclusions about economic change: the story of the persistence of a large, economically viable, and politically powerful small-scale economy existing alongside of, and often in opposition to, the world of the national corporations. Time and again in the course of the twentieth century, corporate leaders, political leaders, even labor and farm leaders have searched for ways to stabilize relationships among the major institutions of the economy, to realize the persistent, vaguely corporatist dream of an "ordered economic world." But time and again, such efforts have foundered—in large part, because of opposition from a decentralized, small-scale, localistic economic world that survives and thrives and displays considerable strength.

Scholars of the modern era have pointed repeatedly, as well, to how powerful forces of nationalism—the state, the corporate world,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the media, and others—have worked to erode the strength of regionalism in American life. And it is true, of course, that regions and localities are less able to insulate themselves from the pressures of the larger society than they were a century ago. But recent political and economic developments suggest, it seems clear, that reports of the death of American regionalism have been greatly exaggerated. Not only have voting behavior and economic growth displayed striking regional disparities, but there have been signs that the cultural distinctiveness of different regions has come to assume an increased importance to their residents, even as the physical autonomy of regions has declined. John Shelton Reed, for example, has argued in several sociological studies that Southerners in the twentieth century have developed a strengthened sense of their own distinctive cultural identity as a means of defense against the encroachments of the national culture.[30] Other scholars have revealed a strengthened regional self-consciousness in the American West, many of whose residents have developed a sense of their own independent economic interests and a deep resentment of their "subjugation" to the interests of the East.

The twentieth century is not, in short, simply an era of increasing social unity, although the growth of nationalizing forces has been an essential part of its history. It is also an era of persistent (and, in some ways, increasing) divisions, of continuing problems of national definition, of perpetual frustration in the search for a common set of values and norms. It is a time in which a powerful and increasingly uniform national culture exists alongside, and often in conflict with, a broad array of vigorous and enduring subcultures. To understand the modern era requires not only an understanding of the things that have drawn American society more tightly together, but a recognition of those that continue to drive it apart.

A second, and related, issue historians might choose to explore as they seek to explain twentieth-century America is the impact of what might be called the decline of human agency in the modern world. This is an issue that may be of particular value to scholars attempting to explain what has long been among the most perplexing of twentieth-century social phenomena: the emergence of forms of protest and dissent that seem unrelated to clear class-based economic interests. Why have some Americans adapted successfully to the particular character of modern society while others have so strenu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ously resisted it? Why have some felt comfortable with a secular culture while others have clung to fundamentalist values? Why have some embraced economic growth while others have resisted and denounced it? How can we relate the experiences and outlooks of such dissenting groups to the experience and outlook of the "mainstream"?

Prevailing explanations of dissent tend to stress the exceptionalism of the disenchanted, their isolation and alienation from the center of American life. And yet, it is possible to look at much of contemporary dissent and see not so much an aberrant response to social change as an exaggerated expression of concerns that virtually all members of society share. Everyone in the modern world is confronted with the reality that his life is in some measure governed by forces and institutions he cannot fully control; everyone must face hard limits in his ability to shape or affect his world. At best, modern man views his surroundings with considerable ambiguity, enchanted by the material benefits of industrial progress, yet troubled by, and at times fearful of, its assault on individual and community autonomy. When those anxieties become acute, as they often do for both economic and noneconomic reasons, they can fuel social protests as seemingly disparate as the growth of a radical counterculture and the resurgence of right-wing fundamentalism. And that same uneasiness supports some of the pervasive expressions of mainstream alienation: disenchantment with government and politics; contempt for bureaucracy; suspicion of the power of the media; fear of technology.

Twentieth-century Americans are not, in short, simply a people divided between those who have adapted successfully to the modern world and those who have not, or between those who have profited from industrial progress and those who have failed to do so or have been obstructed from doing so. Such divisions do of course exist, but they exist within the context of a society whose members share, in varying degrees and in various forms, a set of common and peculiarly modern anxieties. How those concerns have affected individual behavior, and why they have affected different groups in such different ways, is another important question of twentieth-century American history.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

* * *

Historians who assess the state of their profession in the 1980s seem increasingly to share a single lament. Historical scholarship has become fragmented, compartmentalized, diffuse. The emergence of new approaches, new methodologies, new theories has opened important areas of human experience to historical inquiry for the first time. But the price has been a loss of unity, a failure to bring together the disparate work of the many branches of the profession into a coherent, synthetic narrative. According to Bernard Bailyn, "The great proliferation of historical writing has served not to illuminate the central themes of Western history but to obscure them."[31]

The lament of those who work in the field of twentieth-century American history is somewhat different. Theirs is a field in which the traditional political narrative still predominates; in which the explosion of new scholarship has had only a limited impact; in which interpretive battles have been muted and methodological controversies rare. It may be too much to say, as one *Annales* scholar who has considered this problem has claimed, that two fundamentally different historical cultures have emerged within the profession:

> one contemporary, mainly descriptive and oriented toward "événements," living by the year and by the day, strongly preoccupied by politics and ideologies . . .; the other, a new historiography, with a broader orientation and analyzing in depth, with an eye for the constants of environment and climate, large geographical units, economic cycles, and social structures, and an inclinaton to the long term.[32]

But it is clearly true that contemporary history has not yet embraced many of the concerns that have revolutionized the study of the more distant past.

As the historical profession at large searches for unity and coherence in the face of the enormous variety of contemporary scholarship, historians of the twentieth century face a different task. They must look for ways to broaden their focus and diversify their approaches, to connect the political narrative that continues to dominate the field to the social, cultural, and economic forces that form the context of politics. They must learn from the innovations in

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

other fields of historical scholarship and bring into focus more areas of the human experience.

But they would do well in the process to take note of the problems historians in other fields have encountered and to recognize that the fragmentation of historical scholarship that has already afflicted so much of the profession would be even more costly should it come to afflict the study of the modern era as well. Writing the history of twentieth-century America will require not simply a search for those aspects of the recent past that have so far eluded scholars. It will require as well a recognition of the unique interconnectedness and interdependence of the modern world, and hence a search for the broader patterns and enduring themes that might begin to make this most complex of centuries comprehensible to its own citizens.

ENDNOTES

[1]"The Promise of American History: Progress and Prospects," *Reviews in American History*, 10 (December 1982).

[2]Daniel T. Rodgers, "In Search of Progressivism," ibid., pp. 113-32; Thomas J. McCormick, "Drift or Mastery? A Corporatist Synthesis for American Diplomatic History," ibid., pp. 318-30.

[3]Godfrey Hodgson, *America in Our Time* (New York: Doubleday, 1976), p. 3.

[4]Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (New York: Harper & Row, 1973) p. 901.

[5]H.L. Wesseling, "The *Annales* School and the Writing of Contemporary History," *Review* 1 (Binghampton, N.Y., 1978): 185-94.

[6]Thomas C. Cochran, "The 'Presidential Synthesis' in American History," *American Historical Review* 53 (1948): 748-59. See also Allan G. Bogue, "The New Political History in the 1970s," in *The Past Before Us*, edited by Michael Kammen (Ithaca, N.Y.: Cornell University Press, 1980), pp. 231-51; Morgan Kousser, "Quantitative Social-Scientific History," ibid., pp. 433-56.

[7]Lee Benson, *The Concept of Jacksonian Democracy* (Princeton: Princeton University Press, 1961).

[8]Michael F. Holt, *Forging a Majority: The Formation of the Republican Party in Pittsburgh, 1848-1860* (New Haven: Yale University Press, 1969); Sheldon Hackney, *Populism and Progressivism in Alabama* (Princeton: Princeton University Press, 1969); J. Morgan Kousser, *The Shaping of Southern Politics* (New Haven: Yale University Press, 1974).

[9]Richard L. McCormick, "The Party Period and Public Policy," *Journal of American History* 66 (1979): 279-98.

[10]Richard L. McCormick, *From Realignment to Reform: Political Change in New York State, 1893-1910* (Ithaca, N.Y.: Cornell University Press, 1979).

[11]See, for example, Allan J. Lichtman, *Prejudice and the Old Politics: The Presidential Election of 1928* (Chapel Hill: University of North Carolina Press, 1979).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[12]E.P. Thompson, *The Making of the English Working Class* (New York: Pantheon, 1963).

[13]See Robert F. Berkhofer, Jr., "The Two New Histories: Competing Paradigms for Interpreting the American Past," *OAH Newsletter,* May 1983, pp. 9-12. A number of leading radical historians discuss their approach to their craft in Mid-Atlantic Radical Historians Organization, *Visions of the Past* (New York: Pantheon, 1984).

[14]See, for example, Eugene Genovese, *The Political Economy of Slavery* (New York: 1965), *The World the Slaveholders Made* (New York: Pantheon, 1969), and *Roll, Jordan, Roll* (New York: Pantheon, 1974); Herbert Gutman, *Work, Culture, and Society in Industrializing America* (New York: Alfred A. Knopf, 1976); and David Montgomery, *Beyond Equality: Labor and the Radical Republicans, 1862-1872* (New York: Alfred A. Knopf, 1967) and *Workers' Control in America* (Cambridge and New York: 1979).

[15]Gabriel Kolko, *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: Free Press, 1963) and *Railroads and Regulation, 1877-1916* (Princeton: Princeton University Press, 1965); James Weinstein, *The Corporate Ideal in the Liberal State, 1900-1918* (Boston: Beacon Press, 1968).

[16]Barton J. Bernstein, "The New Deal: The Conservative Achievements of Liberal Reform," in *Towards a New Past,* edited by Barton J. Bernstein (New York: Pantheon, 1968); *New Deal Thought,* edited by Howard Zinn (Indianapolis and New York: Bobbs-Merrill, 1966), pp. xv-xxxvi.

[17]Nelson Lichtenstein, *Labor's War at Home: The CIO in World War II* (Cambridge and New York: Cambridge University Press, 1982); Roy Rosenzweig, *Eight Hours for What You Will: Workers and Leisure in an Industrial City, 1870-1920* (Cambridge and New York: Cambridge University Press, 1983); Ronald W. Schatz, *The Electrical Workers: A History of Labor at General Electric and Westinghouse, 1923-1960* (Urbana and Chicago: University of Illinois Press, 1983); Peter Friedlander, *The Emergence of a UAW Local, 1936-1939: A Study in Class and Culture* (Pittsburgh: Pittsburgh University Press, 1975).

[18]*The Culture of Consumption,* edited by Richard Wightman Fox and T.J. Jackson Lears (New York: Pantheon, 1983).

[19]Richard Hofstadter, *The Progressive Historians: Turner, Beard, Parrington* (New York: Alfred A. Knopf, 1968).

[20]John Higham, "The Cult of the 'American Consensus': Homogenizing Our History," *Commentary* 27 (1959): 94-95; Richard O. Curry and Lawrence B. Goodheart, "Encounters with Clio: The Evolution of Modern American Historical Writing," *OAH Newsletter,* May 1984, pp. 28-32.

[21]Daniel Boorstin, *The Americans* 3 vols., (New York: Random House, 1958, 1965, 1973).

[22]Richard Hofstadter, *The American Political Tradition* (New York: Alfred A. Knopf, 1948) and *The Age of Reform* (New York: 1955). Daniel Singal provides a penetrating study of Hostadter's scholarship and his intellectual progression in a forthcoming essay in the *American Historical Review.*

[23]See, for example, William E. Leuchtenburg, *Franklin D. Roosevelt and the New Deal* (New York: Harper & Row, 1963); Frank Freidel, *Franklin D. Roosevelt: Launching the New Deal* (Boston: Little, Brown, 1973).

[24]Arthur M. Schlesinger, Jr., *The Vital Center* (Boston: Houghton Mifflin, 1949).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[25]Louis Galambos, "Technology, Political Economy, and Professionalization: Central Themes of the Organizational Synthesis," *Business History Review* 57 (1983): 471 and passim. Galambos has also assessed the state of the organizational approach in an earlier essay, "The Emerging Organizational Synthesis in Modern American History," ibid., 44 (1970): 279-90. See also *Building the Organizational Society: Essays on Associational Activity in Modern America,* edited by Jerry Israel (New York: Free Press, 1972).

[26]Alfred D. Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: Harvard University Press, 1977).

[27]Ellis Hawley, *The New Deal and the Problem of Monopoly* (Princeton: Princeton University Press, 1966) and "The Discovery and Study of a 'Corporate Liberalism,'" *Business History Review* 52 (1978): 309-20; Robert D. Cuff, *The War Industries Board: Business-Government Relations During World War I* (Baltimore: Johns Hopkins University Press, 1973); Thomas K. McCraw, *TVA and the Power Flight, 1933-1939* (Philadelphia: Lippincott, 1971); and *Regulation in Perspective,* edited by Thomas McCraw. (Cambridge: Harvard Business School, 1981).

[28]Robert Wiebe, *The Search for Order, 1877-1920* (New York: Hill and Wang, 1967); Samuel P. Hays, *The Response to Industrialism, 1885-1914* (Pittsburgh: Pittsburgh University Press, 1957).

[29]See Barry Karl, *The Uneasy State: The United States from 1915 to 1945* (Chicago: University of Chicago Press, 1983), esp. pp. 1-7, for a thoughtful challenge to the nationalistic premises of modern American historiography. Morton Keller, *Affairs of State* (Cambridge: Harvard University Press, 1977) raises questions about the same premises in discussing the late nineteenth century.

[30]John Shelton Reed, *Southerners: The Social Psychology of Sectionalism* (Chapel Hill: University of North Carolina Press, 1983).

[31]Bernard Bailyn, "The Challenge of Modern Historiography," *American Historical Review* 87 (1982): 1-24. See also Lawrence Stone, "The Revival of Narrative: Reflections on a New Old History," *Past and Present* 85 (1979): 3-24.

[32]Wesseling, "The *Annales* School and the Writing of Contemporary History," p. 191.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Richard Marius

Musings on the Mysteries of the American South

WHAT IS THE SOUTH? The question has always troubled and sometimes infuriated other Americans. It has seldom troubled Southerners. They take their special identity for granted. No other region has preserved such intense loyalty among its citizens; no other has so inculcated in its people the conviction that they were superior beings. At times their ferocity in bragging about their superiority might lend credence to the supposition that the entire region is plagued by a mass inferiority complex. But still the mythology has been fixed in the Southern earth, and it remains. Even those who reject the mythology cling to their sense of being unique. In my experience, Southerners speak of themselves in a much different way from that of New Englanders speaking of themselves or even of Californians speaking of *themselves*. And their delight in recognizing one another in places outside the South is always a little reminiscent of nineteenth-century Englishmen coming on each other in some outpost of empire.

The original cause of this Southern distinctiveness was slavery and the society that slavery engendered, an astonishingly complex society whose ruling classes steadfastly maintained that the whole thing was simple, after all, that God had ordained slavery and had ordained a superior class of white men to protect the helpless, simple-minded, innocent black who could not possibly survive as a free creature. As blacks were set so low on the human scale that they were hardly more than beasts, white Southerners—their keepers—elevated themselves to become heirs of a mythical and divinely or-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

dained aristocracy directly out of the pages of Sir Walter Scott. (I have never visited one of the great museum-piece houses of the wealthy antebellum cotton planters in Mississippi where I did not find at least one edition of Scott's collected works in the library.)

Most Southerners did not own slaves before the Civil War, but the slaves were there—thousands and thousands of them. It seems in retrospect to have been a miracle that the few who profited from slavery managed to convince the rest—the poor whites, the yeomen, and indeed much of the rest of the country—that the slave system existed for some divine, or at least for some necessary, purpose and that the cotton kingdom was the best of all possible worlds. Throughout the century after the war, through lynch-law and Jim Crow and sharecropping, through such poverty that starving women and children ate clay to fill their stomachs and pellegra left innocent skin broken out in peculiar and unforgettable blemishes, through the deep-gullied erosion of the soil, through illiteracy and the physical and mental devastation of the cotton-mill children, through the near-destruction of the old yeoman-farmer class, the South kept up its relentless self-justification. At the heart of that self-justification was the conviction (sincerely or hypocritically held; it was probably both, and it hardly matters) that the South was a special place, different from all other places in the world, and that here was a special people and that here a special law applied, and that it did not matter whether non-Southerners understood the region or not.

Southerners coined the term "the peculiar institution" as a euphemism for slavery before the war, and that word—"peculiar"—was used in its older meaning as "unique," like nothing else on earth, and it carried with it the echo of sacred usage as when the called of God, Jews or Christians, were called a "peculiar people." The divinely peculiar was not to be questioned. Rather, it was to be accepted and venerated and made the exemplar of life, for if something was so different from the ordinary, it must be divinely inspired.

The South remains different. But how? Defining *how* the South is different has at times become a national obsession. At various moments in our history, some image of the South has served to send an electric shock through the rest of the country, making Americans define themselves. Margaret Mitchell's *Gone With the Wind* and the immensely powerful movie made from the book struck the country in the slough of the Great Depression and the threat of war, and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

probably helped Americans believe that they could endure all kinds of defeat and still emerge in possession of themselves and triumphant. The book might have been popular in any time, but at its particular time, it became a national myth.

In the 1950s and the 1960s, saving the South became an almost equal obsession, for then the South was seen as the regional incarnation of all that was hateful and decadent and backward about America. The redemption of the South came to be thought of as a national redemption, salvation from the image of a bumbling, wicked, greedy, piously hypocritical America conveyed in books like *The Ugly American* and by a national government that seemed unable to assert itself to do any good thing anywhere in the world.

Now America is changing in what seems to many to be one of those great bends of our history, and it may be that the very issue of regionalism itself is being posed by the transformation of the national society. What happens when Dixie becomes the Sunbelt? Does the South survive as a peculiar region? Can regionalism survive in America? Or are we destined to become a homogeneous mass of urban life where the discovery of one's identity is made in the neighborhood rather than in the region and where everyone speaks with the depersonalized accents of TV anchormen on the national news?

The grudging recognition that I, too, am a Southerner has come on me later in life than it has for most of my compatriots. I am an East Tennessean, and East Tennesseans have never taken very well to being Southerners.

My mother's family stood for the blue and union during the Civil War, and when Tennessee seceded, the men and boys of fighting age slipped off by night to fight for the old flag. The frame house where Mother was born in 1891 still stands, tottering and disused in its grove of ancient oaks in the isolated farm country just above Cleveland, Tennessee. There are thousands of similar houses rotting away across the border states, unmourned as a vanishing landmark because they are simple places made of wood instead of the stately brick that people instantly recognize as "antebellum." These are the relics of the independent yeoman farmers, that class in whom Thomas Jefferson put so much hope, a vanishing or vanished class in America. They were two-story houses built in the shape of an L with a front porch facing the north so that people could sit outside

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in the cool of the day, sheltered from the blast of the summer sun. The roofs of the porches are held up by squat wooden beams that serve as columns. The ceilings are high to allow air to circulate in the muggy summer heat, the rooms relatively narrow. The kitchen is in the leg of the L; a brick chimney stands at each end. The roof is shingled with wood slabs sliced out long ago by an anonymous and expert axeman. If you look around the ruins of one of these yeoman houses, you can nearly always find the remains of a cistern not far from the kitchen door. I recognize them at once when I see them, but so far as I know, none of them has been preserved as a historic landmark. Few people realize how old they are, and the house where my mother was born now stands deserted above its creek choked with reeds, its last whitewash long worn away, its roof sagging, its empty windows gaping blankly onto pastureland where dairy cattle graze, its life departed, and its day done.

East Tennessee's mountains made it a region of small farms, and the configurations of geography made it much easier for East Tennesseans to trade with the North than with the South. East Tennessee is still a special place. To East Tennesseans, Alabama and Mississippi seem not only foreign but alien. By definition, East Tennesseans live within sight of the Smoky Mountains, the great blue barrier between Tennessee and North Carolina. In the flat cotton fields of the Mississippi Delta, an East Tennessean feels out of place and depressed, and Mississippians seem strange.

The accents are as different as the varieties of Southern land. People in the Northeast speak of a "Southern accent," and Boston clerks in stores who make their abominable attempts to imitate it invariably throw in a little bad grammar as though to make the Southerners they are mocking feel at home.

Among themselves, Southerners recognize about twelve accents. An East Tennessean with a mountain hardness in his vowels hears instantly the differences between himself and a Tidewater Virginian, a wilderness Virginian, a seacoast South Carolinian, a Georgian (at least from beyond the suburbs of Atlanta), an Alabamian, a Mississippian, and a Louisianan. He is very likely to mistake someone from the Ozarks or from certain parts of Texas as being from his own region, and he feels a great affinity with North Carolinians because they pronounce their o's and their r's very much the way he does, and they nearly always sound their final g's. To people who

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

live in the South, the variety of accents and geography make the region seem like a some bright quilt stitched together at a community party where the moonshine and the laughter ran wild.

In New England, an East Tennessean is inescapably a Southerner. Going back and forth between the regions is a journey from the sauna into the snow, a passage made in a few smooth hours to the tedious accompaniment of flight attendants apparently universally trained by the same tape recorder, but a transit all the more startling for the speed in which it is accomplished. And the region that, within itself, seems broken into mutually suspicious and even hostile parts, appears from the distance of a thousand miles to be something at least akin to the old "Solid South" that was once a seemingly eternal piece in the political landscape.

But what precisely is common back there that is different from the Northeast? I may say at the very beginning that some qualities that may seem uniquely Southern are unique only in the magnitude of their presence in the South. And for the very reason that I have mentioned above—the enormous disparity of the interior regions of the South—any generalizations about the larger region, the old Confederacy, immediately call up exceptions.

On the surface at least, a great many things now look the same in the South as they do everywhere else. Atlanta, Nashville, Little Rock, Birmingham, even New Orleans, all have clusters of high-rise buildings which needle skies that on bad days turn brown with pollution. Not long ago I took a late-night walk in downtown Atlanta and felt dismayed at the eerie quiet in the deserted streets. It was like walking along Park Avenue late in the evening, and an alarmed friend told me later that such strolls are as dangerous now in Atlanta as they are in parts of Manhattan.

Those large cities throughout America share not only a common architecture but also purvey a familiar common culture. So much in America looks the same—airports, hospitals, and McDonalds, Burger-Kings, and Sears stores, asphalted shopping malls with their gargantuan parking lots, neon signs with flashing arrows frenetically pointing, plate glass and colored plastic, civic art in the garish, abstract mode, the linear forms of suburban subdivisions, movie-house complexes that advertise six or eight films at once on a mass-produced billboard, and of course television. Not only are network television programs the same all over America, but the people who

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

work in the local TV stations look the same with their makeup and their smiles and their hair sprayed down to resist a hurricane, personalities cast in a molded cheer that could be melted only by the atomic bomb.

If there is a general victim of economic progress in the South, it is the small and medium-sized towns that once maintained a certain stateliness and bucolic distinction, and once created abiding loyalties. The automobile is king there as it is everywhere else in America, and Tuscaloosa and Montgomery now look fully as ugly as Camden or Worcester. The downtown shopping district of Greenville, Mississippi, continues to decay despite radical redesigning of the streets to make them more congenial to pedestrians. But people don't want to be pedestrians; they want to drive six miles for a six-pack, and in downtown Greenville, empty stores gape through dirt-streaked plate-glass windows at empty streets. I wonder if anyone strange to both cities and transported on a seething summer morning from downtown New Haven to downtown Greenville could tell the difference at a glance.

The smaller towns—like Lenoir City, Tennessee, where I went to high school, and Loudon, our county seat—have suffered a more terrible fate. They are within a half-hour's drive of the sprawling, glittering malls of Knoxville. John Gunther once called Knoxville the ugliest city in America, and shortly before he died, he repeated that judgment in a national television interview. Since his time the cancerous spread of the city has become not ugly but hideous. For nearly twenty miles out old Highway 11 to the west of Knoxville, in what used to be a country of small farms on gently rolling hills, the city has fouled the land in an unplanned, wild growth of glittering and vulgar greed. No one seems to notice the ugliness. The great malls with their treeless asphalt parking lots suck shoppers out of the surrounding small towns like some giant vacuum cleaner.

When I was a child in the thirties and forties, Lenoir City, its streets lined with great trees, was endless spectacle on Saturday mornings. Farmers poured into the little town (it numbered fewer than four thousand souls) to visit, to chew tobacco, and to spit and whittle and to look into store windows and to buy nickel ice cream cones for the children and maybe shoes and perhaps, if they had fifteen cents, to see a double feature, a serial, a cartoon, the Movietone news, previews of coming attractions, and a half-dozen filmed

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ads at the movie house called the Grand Theatre. The prospect of going to town on Saturday gave children the courage to endure the rest of the week. Twilight, falling pearl-gray over a country town emptying before milking time in the summer, was perhaps the first taste a Southern child had of the melancholy that W.J. Cash once noted as one of the enduring qualities of Southern life. Now Saturdays in Lenoir City are too empty for melancholy and lend themselves to those feelings one has in coming on an abandoned Holiday Inn. There is not enough there to call up any profound feelings about what once was. All over the South, similar small towns have suffered a similar fate. But I surmise that a similar decline has affected towns in the orbit of large cities throughout America.

The swelling of great Southern cities has been accompanied by a corresponding emptying of the land itself—a universal change in America. The drift away from the farm, a drift visible for decades, now is at the flood in the old Confederacy, as it is everywhere else.

The emptiness of the land is most perceptible from the air. To someone driving along an interstate, the steady flow of familiar trademarks on billboards may give an impression of crowded commerce almost everywhere. But from a plane on a clear day, the immensity of the Southern forest is visible to the horizon, broken here and there in a few regions by cultivated valleys and some broad plains of checkered fields.

I happen to be writing these lines in a plane about the size of a butterplate flying three thousand feet above Arkansas, bound for El Dorado where I am to spend two days working with the public schools to help them make writing a larger part of the curriculum.

Only a few minutes ago we banked steeply across the great, mud-colored Mississippi River rolling grandly south through its fertile alluvial plain. Now our flight path carries us over broad, brown fields already turned under for the cotton crop and for the soya beans that have displaced cotton in much of the South. Yet even here, in some of the richest land on earth, the vast forest is ever present, lurking to the south and north at the fringes of cultivation as if waiting patiently to reclaim what centuries of human toil have only temporarily removed from the sovereignty of the wilderness.

And now, even as I write, we are passing over the realm of the forest's undisputed domain, and a medium-sized river meanders through the trees, looking like a snake with its head buried in the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

swamps whose waters glitter in the spring sunlight. I think—however unwillingly—that we could fall into that forest and be discovered only years from now by the archaeologists of some future civilization.

The movement off the land has had an incalculable effect on Southern life, and that effect has been perhaps different because Southern society itself, with its huge, black, rural population, was different. The South used to be the only place in America where blacks lived on the land in great numbers. During my adolescence, white Southern males my age were going to Detroit (we always called it DEEtroit) or to Pittsburgh or Chicago or someplace else north. We did not realize it, but blacks were streaming out, too, and for blacks, the movement off the land was their first stride toward freedom.

Even as late as the 1950s, the cotton fields in the black belt swarmed with black laborers, for King Cotton required a multitude of servants. But steadily the machines have come—the enormous tractors, the great plows, the cultivators, the crop-dusting planes with their quietly lunatic and often alcoholic pilots, and above all, the mechanical cottonpickers, big as houses, rolling grandly through the great fields and capable of doing in a day the labor that once required a hundred field hands.

The demise of sharecropping and the tenant farm system—a system extolled by Southerners such as William Alexander Percy who supposed that blacks must always be dependent—left blacks nowhere to go but to the city. Although multitudes of them fled north, most of them stayed south. In towns like Atlanta, Birmingham, Bessemer, New Orleans, and Martin Luther King, Jr.'s, Montgomery, the blacks found themselves in an almost classical revolutionary situation as Marx would have described it. They were rootless, regimented, assembled in compacted living space, deeply dependent on wages, and made to discover suddenly the twin possibilities of economics and violence. It was Dr. King's genius and inspiration to proclaim nonviolence sincerely and steadily, while another group of blacks, just as sincerely and steadily, posed the threat of violence, and by their occasional riots, convinced white America that it should heed Dr. King, make the best they could of his doctrines, even embrace them, or else endure a far worse fate at the hands of those radicals who seemed, during the mid-sixties, to be nearly ascendant. "Non-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

violence" included in its very name a continual reference to violence—to those others out there, ready to act if Dr. King's appeal should fall on clay ears.

Everywhere the black revolution was an urban revolution, possible only after blacks had been forced off the plantation and the tenant farm, out of the feudal servitude with its divisions and paternalism that kept them unable to organize themselves. Isolated in small groups in the countryside, they had been powerless to resist the degradations enforced by lynch law and the almost equal humiliation of the plantation store that kept them in peonage. Their traditional rural dwelling place was symbol and cynosure of their disconnection from one another—a shack with galvanized iron washtubs hanging on the exterior walls and a black iron kettle in the ashes out back and the wind blowing through the cracks, a shack usually squatting as though in stupefaction in the shadeless middle of a sunblasted field and looking as temporary as a dead leaf on the land. But once massed in the cities, blacks discovered that if they did not get what they wanted, they could fling themselves into the machinery of urban life and bring it crunching to a halt.

Southern whites resisted integration and resisted it violently for a time because they imagined the continuation of the old rural culture that had dominated the South. In a rural culture, when people of different races live closely together in a rough equality, everyone is presumably brought into the same society, and that society shares intimacies that include play and religion and marriage and routine social rituals. Now the racial scene in the South is calm—much calmer than it seems to be in Boston. Atlanta and Birmingham have black mayors. Formal integration is a fact. The University of Mississippi at Oxford, where the national guard had to be mobilized to protect black students in 1962, now rolls peacefully along with a large black student population. In some years the entire starting five of the University of Alabama basketball team has been black. Some large public high schools in Southern cities remain nearly completely black, but in small towns such as El Dorado, blacks and whites attend the same classes without incident. Nearly every Southern TV station has a few black announcers who have proved to be as chatty and vapid as their white counterparts. Southerners like to say that their religion and their general neighborliness have worked

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

together to bring about racial harmony, and I suspect that they are at least partly correct.

But I suspect, too, that once integration came, they discovered that it really changed very little. It most certainly did not mean that the races would share real friendships and an intimate social life. Southern whites fought integration from a stockade of rural memory, but integration happened in urban culture. In urban culture, intimacy comes only when people choose to be intimate; it is not forced on them by the forms of civic life. Racial integration works unexpectedly well in the South primarily because it has come in a context of the urban indifference that now seems as familiar there as it is elsewhere. In the school system in El Dorado, blacks gather with blacks and whites gather with whites in distinct little knots in the periods between classes. On occasion, teachers told me, a particularly outstanding black child will be popular among white children. Most of the time the groups get along in an amicable social segregation within the peacefully integrated school system. Very much the same thing may be said of Northern high schools I have visited.

Yet the South remembers the land and its rituals, and if I have a single impression of the region, it is of a longing for community, a nostalgia for a golden age that (like most such nostalgia) carries with it the resolve to hope and the bitterness of frustration.

The South has always sought community and seldom found it. Maybe it has never found it except in the tiny, isolated rural neighborhoods that together formed so much of the collective folk memory of the region. Everybody whose family has lived a long time in the South carries around a familial treasure trove of rural recollection burnished and worn and handed down through succeeding generations. In my experience, even families who have been in the city for a couple of generations will quickly go back to their rural ancestry when someone asks them a question about their origins. "Well, we live in Knoxville now, but originally we were from Hawkins County."

It has struck me again and again that Southerners are storytellers by habit and that urban Northeasterners seldom are. Storytelling grows up always within the context of a community that will understand the story, treasure it, and pass it on. Whether in ancient Mesopotamia or Greece or in the not-so-distant American South, the storyteller in the rural family or in the neighborhood preserved his-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tory, upheld values, and united the community against outsiders by his tales. The storytelling tradition remained so strong in the South for so long because the land was so wild, the people so poor, and literacy so scarce that stories provided the satisfaction for desires readily assuaged in urban societies by concerts, plays, lectures, and town meetings, and by newspapers, magazines, and books.

The South remained wilderness until far into the nineteenth century. Not merely rural, but wilderness. Such is the testimony of every Northern traveler in the South before the Civil War. Whites moving into the South came in small groups and settled in small communities built close to stockades that guarded them against Indians ever hostile and ever threatening. They were far from the center of American population in the East and often far from each other. Even on the eve of the Civil War, when Frederick Law Olmsted traveled in the South, he found that terrible isolation in most places he visited, and his books convey even yet the dreary melancholy of a primitive society where the struggle for existence took so much time that little was left for the pursuit of any higher culture—the very opposite impression from what Southerners with aristocratic pretensions have longed to believe about their ancestors. Charleston, Richmond, Montgomery, and New Orleans were the most important cities in the old Confederacy; a vigorous walker could cross any of them in a half hour. But small though they were, the cities had people and company and, in time, the rudiments of a higher culture.

In the wilderness where most people lived in isolation among their ragged fields against the unending forest, the greatest delight was to see another human being and the greatest burden was loneliness. Everett Dick recalls the comment of a French traveler, André Michaux, who came on a house in Kentucky where a woman told him that she had not seen anyone outside her own family in eighteen months.[1] In his travels, Olmsted seldom had difficulty finding someone to take him in for the night. Most people appeared to delight in having a visitor in the house. Olmsted and many other travelers observed an isolated people starving for human companionship but often so stunted by their long solitude that they were unable to converse except on the subjects of guns and clothes and Indians and the forest. Because of disease and danger, Southern life remained for most solitary, poor, nasty, brutish, and short, and except for a very few families of real wealth—the people who built the great man-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sions like Houmas House in Louisiana or Gaineswood in Demopolis, Alabama—life offered little leisure for the finer things.

Religion became the anodyne for toil, isolation, and anonymity. Religion deserves an extended treatment in this essay; more than any other single social phenomenon, religion has marked the South, affecting both whites and blacks, giving the region its greatest distinctiveness, expressing its culture, often infuriating the rest of the country by its loud self-righteousness and frequent hypocrisy. Sometimes it is hard to say whether Southerners created their religion or their religion created them; both things probably happened. It was—and is—a special sort of religion, adapting itself to the fundamentally irreligious life of the frontier.

The South was settled largely by the nomadic down-and-out, not only of England but of America. The religion of the Dixie Frontier was the religion of Baptists and Methodists and all of their vehement, contesting offshoots. Oddly enough, these emotional (sometimes *hysterical* is the better word) sects were refined in the fire of the urban revolution in England, religions of the urban dispossessed, and their incandescent fervor was easily transportable to the Southern wilderness.

It was a remarkably homogeneous religion in a remarkably homogeneous population. The "Englishness" of Southern whites, especially in the middle-sized and smaller towns, seems hardly to have changed from Olmsted's time. The great tide of late nineteenth-century and early twentieth-century immigration rolled against the edges of the old Confederacy and washed in a few Central and Southern Europeans here and there, and then receded. Most immigrants found the South uncongenial, and they stayed away from it. I suspect that the widespread Southern use of "ain't," an eighteenth-century Cockney English contraction, testifies in some sense to Southern white origins. It would appear that such religion as these early white settlers brought with them came out of the narrow streets of their lower-class English urban origins.

It was perforce an anti-intellectual religion, and despite the occasional establishment of colleges and the opening of seminaries to train ministers, Southern religion remained predominantly anti-intellectual and remains so to this day. In his book *Anti-Intellectualism in American Thought*, Richard Hofstadter made much of the role of Southern evangelists in making their congrega-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tions believe that the life of the mind could lead people directly to hell. Everyone knows of the Scopes monkey trial in Dayton, Tennessee, in the hot summer of 1925. In 1975 a group from the University of Tennessee went to nearby Dayton to put on a program commemorating the fiftieth anniversary of the trial that pitted William Jennings Bryan against Clarence Darrow—believing fundamentalism against cynical urbanity. Bryan won his case in 1925; John T. Scopes was fined a hundred dollars for teaching evolution, and the law against evolution remained on the books until the late 1960s. When the university group went back to Dayton half a century after the trial, its members played to an almost unanimously hostile audience that still stood by Bryan and divine creation.

Members of the group should not have been as astonished as they were in speaking of the experience. I once paused during a lecture on Darwin to a couple of hundred University of Tennessee freshmen in my European history survey and asked them how many would refuse to believe in evolution on religious grounds; fully two thirds of them held up their hands—and that was only a decade ago.

Southern religion provided a strong medicine of consolation for a society much in need of it. Its preachers fell naturally into passionate declarations that the bitter life most Southerners experienced formed a necessary part of an austere and magnificent divine plan. They extolled the bright salvation beyond the toil of this earth. In their passionate rhetoric, the only purpose for this life was to provide entry into the life to come.

Except in rare periods of ecumenical camp-meeting frenzy, it was a ferociously intolerant religion, however it was expressed. If life had any meaning at all, that meaning depended on exact obedience to the faith that God had ordained. Throughout their history, Southerners have burned to find God's exact will, and once sure of it, they have felt a great commission to enforce it on others. It is a mood that carries into their politics, their social rituals, and their education. Southerners could tell by their own experience that their God was watchful, wrathful, and merciless to transgressors. The history of Southern religion has been a story of ceaseless internecine conflict among Christian sects who ridiculed, mocked, and fought each other in furious resolve to make their own truth the only truth. In them we discover that medieval yearning for religious conformity which might become in itself proof of God's existence. But however Bap-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tists, Methodists, Cumberland Presbyterians, Pentecostals, and others might war against one another, they were united in their fundamental judgment of the purposes of this life and their praise of death, which opened the gates to eternity.

This much about Southern religion is commonplace knowledge and fits traditional Christian theology, which for centuries proclaimed the hope for paradise as present consolation for the trials of this bitter world. But Southern evangelical religion offered a further consolation in the repeated catharsis by wild hysteria in the religious service itself. Olmsted records his visit to one of these meetings and gives an account of the hypnotic, repetitious shouting of the preacher who punctuated his phrases with a gasping "Ah" that aroused the entire congregation to frenzy. "It was astonishing to see with what readiness the faces of those who, up to the moment he gave the signal, had appeared drowsy and stupid, were made to express distressing excitement, sighing, groaning, and weeping," Olmsted says.[2] Other travelers tell us that at these services (often held outdoors) people shouted, barked like dogs, found themselves seized by uncontrollable jerking, flung themselves on the ground, fell into trances, groaned aloud, and of course wept rivers of tears. They sang hymns of their own making, plain, simple expressions of morbid piety and enthusiastic hope that could be lined out by a song-leader and sung lustily by the whole congregation—a mode of popular music whose spirit passed directly into modern country and gospel singing.

In my youth, I observed similar paroxysms in mountain Baptist churches far in the back country. I recall a woman who leaped high into the air shouting and clapping and flinging her hands over her head until she fell over a church bench in a great crash that seemed certain to injure her for life. But she had scarcely hit the floor when she bounded up and continued her shouting as though nothing untoward had happened. I recall a woman so taken with jerking that her head seemed ready to fly from her body. My own effort with a reporter friend of mine to visit a snake-handling Pentecostal service was frustrated by the Tennessee Highway Patrol, which shut down the snake-handling church on the Sunday a week before we intended to go there. It was not an unmitigated disappointment for me, since my fascination with Southern religious expression was somewhat diluted by the prospect of spending a long evening with

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ecstatic and shouting people who, somewhat too generously for my tastes, passed around rattlesnakes and copperheads. (The Tennessee chapter of the American Civil Liberties Union later won the legal right for these people to handle poisonous snakes as much as they pleased so long as they did not give them to people who did not want them.)

Even today, from any number of radio stations in Southern towns, one can hear the same sort of preaching that Olmsted described, and habitual religious hysteria remains in many congregations. It hardly requires the learning of a psychologist to perceive the value of this wild emotional release to the poor souls who experience it now or who experienced it in the last century. It does make people feel better. It is much less expensive than psychotherapy (though perhaps at least as effective) and certainly much less harmful in the long run than cocaine or heroin. For isolated people on the frontier, lacking our own refinements for dealing with depression, loneliness, and strain, the complete surrender to occasional hysterical religious outbursts provided an anodyne to toil and suffering.

To Northeasterners, the greatest mystery about emotional Southern religion lies in its power to endure into the present with the vigor that has translated itself into Jerry Falwell's "Moral Majority" and the vast conservative political enterprise of Senator Jesse Helms of North Carolina. Like the band of University of Tennessee faculty members and students who went to Dayton some years ago, many people find it bewildering and disturbing that enthusiastic and intolerant fundamentalist religion maintains such power in a supposedly enlightened America.

But in fact, that religion has found the new cities of the South a fertile garden, and it has flourished there for many of the very reasons it once flourished in the wilderness. The isolation and loneliness of the modern megalopolis is a sociological truism. A great many people worship at the shrine of celebrity culture in our modern society and are thereby reduced to feelings of worthlessness and failure by that same culture. The sense of isolation felt by urban dwellers is so profound that almost anything that makes people feel important is likely to have an effect seemingly all beyond the effort. Thomas J. Peters and Robert H. Waterman, Jr., remark in their book *In Search of Excellence* that successful businesses "fawned on their customers."[3] Not many of us are fawned on by anyone, but any

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

large fundamentalist church provides instant fawning for anyone who enters at the doors. One is met by volunteer greeters who enthusiastically shake hands and smile; one's name and address are taken; visitors are often recognized from the pulpit and sometimes applauded; and either the pastor or a group of volunteer visitors is sure to call at one's home within a week or so.

Fundamentalist preachers and their churches provide a sense of community, a place in the world, that may seem vulgar to cooler souls—who often get their emotional sustenance on the therapist's couch. It is a community strongly bonded together by an almost fabulous sense of caring, and it uses for its public assemblies many of the techniques of the old-time camp meetings where people came out of the literal wilderness to satisfy the same human longings that now bring thousands flocking in from the suburbs to cavernous churches on Sunday mornings. Moreover, it works now in the South where the sense that individuals *must* belong to a community remains unusually powerful.

A Texas pastor (no fundamentalist), spending a term in study at the Harvard Divinity School, said to me the other day that he had hit on an essential difference between Southerners and Northeasterners. "The first thing you know about a Northerner is the set of ideas he thinks are most important. Whatever he does, he feels that he has to have ideas about it, and if he doesn't have ideas, he doesn't feel good about himself. If you know him long enough, you may discover that he has some feelings, too, and a family and a personal life. He doesn't want to share any of these things with you until he knows you well. But with Southerners, the first thing you know is their personal life. They want you to know right away about their families and about their recreation and about their personalities. But you have to know a Southerner a long time before he'll confess to having any ideas." I thought there was something in what he said, and it helps explain why so many thousands and thousands of Southerners are flocking into the fundamentalist churches where there is a willing audience for the intimacies they long to share. The fundamentalist churches provide a stage where people can present their personal lives and be cheered for the kind of people they are.

In 1981 I wrote a story for *Esquire* on the Southern Baptist Convention, the largest Protestant denomination in the United States. One out of every eighteen Americans is a Southern Baptist. Since the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

denomination is concentrated in the South, it towers over religious life there and exercises an overheated, muggy influence on Southern culture. For years, the six seminaries of the Convention have exercised a somewhat moderating influence by graduating pastors who had at least been exposed to a wider world. But in the last decade, the fundamentalists have rebelled. They have organized themselves brilliantly to seize the administrative machinery of the denomination. By electing a succession of solidly fundamentalist denominational presidents, they have provided administrative continuity for their program, and they are now threatening the seminary professors with the loss of their jobs. Many of the fundamentalist leaders have close personal ties with Senator Helms, and their agenda includes a rigidly conservative political program that they believe represents the will of God for all America.

I attended the annual "convention" that June in Los Angeles, and I talked with fundamentalist leaders and with "moderates" representing the seminaries and many of the churches. (No one in the Southern Baptist Convention feels comfortable being called "liberal.") The "moderate" churches were staid and socially conservative, the preserves of those Southern Baptists who have accomplished some worldly success and feel themselves above the perfervid enthusiasms of fundamentalism. My sympathies lay with the moderates. I should say here that in my early twenties I attended two of the Southern Baptist seminaries and found myself out of place and unhappy in both of them and eventually left, much to their relief and mine. But I have kept up some limited association with a few of the faculty members, men both of my generation and of the generation that endeavored to teach me. I respect many of these people and sympathize with their humane intuitions.

Yet it is extremely difficult to see just what it is that they believe or why they believe it. They use words like "salvation," "sin," "conversion," and "evangelism" in oddly ambiguous ways. The big surface issue in the denomination remains the authority of the Bible. Is every word in it literally true, or did the Bible evolve like other ancient books, and is it in some places flatly wrong in its pronouncements about science, morals, and perhaps even in describing the nature of God? The fundamentalists stand on a precept that I once saw emblazoned in huge gold letters across the high front wall of the auditorium of a Baptist church in New Orleans: "God Said It; I Be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lieve It; That Settles It." The moderates have imbibed the scholarly, critical approach to the Bible. That is how the Bible is taught in Southern Baptist seminary classrooms by professors who have taken sabbaticals in Oxford or Cambridge or in German universities. Without exception, I found that the moderates had absorbed at least something from these lessons. Although they are willing to call the Bible "authoritative," they are unwilling to call it "infallible." Yet they dare not make clear pronouncements about their true beliefs, and their language swims with annoying futility in a defensive smokescreen that the fundamentalists claim (with some justice, I think) is dishonest and deceitful. At times, in some of my inconclusive conversations with moderates, I was not sure that they had even thought their beliefs out very well. They spoke often of tradition and very little of change. Their greatest hope seemed to be in keeping things as they were, in preserving a place for themselves within the denomination. I could detect in them no engines gunning for the future. Bailey Smith, then the fundamentalist president of the denomination, had drawn national attention for saying that God did not hear the prayer of a Jew. One of the moderates, pastor of a large, comfortable church, told me privately that the real trouble with Bailey Smith was that he served a one-class "blue-collar congregation" and that he had never been a member of a downtown Rotary Club. It gave me pause to realize that a moderate (who happened to be a former president of the denomination) prized the Rotary Club as a civilizing influence and as a standard for proper behavior.

The fundamentalists, in vivid contrast with the pale moderates, blaze with color and authority. It is, of course, a garish color and a disturbing authority. The annual meeting of the Southern Baptist Convention most resembles the old camp meetings in that one preacher after another exhorts the tireless crowd with sermons that go on from early in the morning until late at night. Now and then we heard a business session or a report, but mostly we heard sermons. In this rhetorical contest, the fundamentalists routed their foes. The fundamentalists blazed with incandescent exuberance, preached passionately to the thirteen thousand delegates gathered into the Brobdingnagian Los Angeles Convention Center, wept, laughed, shouted, sang (often to a rock-and-roll beat), and altogether looked like some conquering army. There can be little doubt that the future of the denomination resides with them. And it

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

may well be that the future of the South lies with them, too. They think they represent the majority of Southerners now; I know of no significant information to prove that they are wrong.

It would not be fair to call the fundamentalists "Fascists" since that word carries with it so much baggage. Yet the fundamentalists share with the old-time Fascists a talent for passionate, dictatorial theatre with an almost eerie power to drive multitudes. They make much of prayer, but it is hardly the prayer that goes on in a closet; at times it is a shouting declaration that sounds very much as if they are telling God who He is and what He should be doing. Their militant mood has nothing to do with meditation, reflection, or research. It is heroic assertion against foes imagined to be conspiratorial, deceitful, and madly powerful, but certain to be defeated by the power of God. It is loud declamation, carefully controlled musical hysteria, lachrymose testimony, all performed in public, all greeted with ululant adulation.

The Reverend Junior Hill from Hartsell, Alabama, castigated labor unions and quoted the words of Christ, "Be content with your wages." He fulminated against "Hollywood preachers with their lace shirts, homosexual preachers, beer-guzzling deacons, and baby-killing abortionists." With enormous skill he depicted the seminary "intellectuals" who scorn "Bible-believing Christians," and he raised in the crowd the sense of their own power to crush any enemy by the overpowering weight and righteousness of their numbers. At the end, he drew thunderous applause and a wildly cheering standing ovation. I sat there listening to him preach, knowing that he represented the very opposite of almost every creed I live by, but fully aware that he was a funny man, deeply affectionate to his family and to anyone else who believed in his gospel, and that he was as good a stump speaker as I have ever heard in my life.

This sense of not receiving the respect they deserve eats away at the fundamentalists. Fundamentalists both inside and outside the Southern Baptist Convention have seized on the term "moral majority" because they believe with all their hearts that they *are* the majority. And they believe that they can fight back by numbers, numbers that will crush those who scorn them. They gush numbers at the slightest pretext because their numbers prove to them that their way is the best way, the only way to have success. When they detect any flame of criticism burning in their midst, they pour statistics on

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

it to put it out. And they do have gargantuan numbers to prove that their way represents the kind of success that Americans most value—the success of a wildly multiplying enterprise. One of their pastors baptized two thousand people in one year, and several of the fundamentalist churches have over ten thousand members each. An editor of one of their publications spoke to me contemptuously of one of the moderate leaders: "He baptized only three people all last year," he said with a harsh and satisfied laugh. Theirs is exactly the democracy warned against by James Madison in *Federalist 10,* the democracy where majorities rule absolutely because majorities are right and minorities are always wrong. With the religious coloration of the fundamentalists, minorities are not only wrong; they are servants of Satan.

The concentrated, relentless emotional absolutism of the fundamentalist churches has proved extremely hard to resist in the South. It is, of course, an angry absolutism, since these people believe that corruption has been sown in God's country by a minority of perverse liberal journalists. (Any time the press was mentioned by any speaker at the Convention, the vast congregation responded with boos and catcalls, and one of the ministers, seeing my press badge, began punching me in the chest with the back of his hand and bawled me out for "printing only bad news.") One may hope that it will burn itself out. But just now it is roaring with a white-hot intensity, and the fuel that keeps it going continues to be supplied by the steadily growing mass of Southerners who are moving to the Southern metropolis and longing for some recognition that they are important even if they are anonymous, people often angry because they are unattended by society.

None of this is to suggest that all white Southerners share the exuberance of fundamentalist religion. But the fundamentalists have succeeded in making Southerners feel still that only religious people can be good people, and the only truly religious people are Protestant enthusiasts. (Several years ago a student reporter for the University of Tennessee daily newspaper reported ecstatically on the state of religious toleration on campus, writing that there, "Unitarians, Jews, Catholics, and Christians" lived peacefully together.) Perhaps we all yearn to be thought good, but it seems to me that Southerners are blessed or cursed to an extraordinary degree by that desire. So Southern culture has a religious stamp that at best seems

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

burdensome and at worst hypocritical to outsiders. High-school and college football games in the South begin with very long prayers piped over the public address system by some local luminary of the pulpit. Team members belong to the Fellowship of Christian Athletes and often conduct revivals and give their testimonies, and praise God for touchdowns and victories. (They are less vocal in praising Him for their successes in the classroom.)

I recently visited a very fine Southern prep school for young men. The student population was almost unanimously white and well-to-do. I noticed that the faculty handbook listed the church affiliation of every teacher, and I noticed also that no Jews taught there. I was told that several Jewish children attended the school—which had a rule that every student should attend church every Sunday. When I asked if that meant that the Jewish kids were required to attend synagogue, the answer was ambiguous. I imagined that the assistant headmaster who had been telling me glowingly of the moral requirements of his school found it suddenly discomforting and perhaps a little impolite of me to bring up the matter of Jews. Jews are tolerated in such places; but they are not supposed to be noticed.

The front wall of one of the classrooms was dominated by a very large picture of Jesus in a handsome frame. Next to it, but frameless and smaller, was a traditional picture of Shakespeare. And smaller still were about twelve pictures of other writers. Chapel was compulsory. On the day I attended, one of the faculty members read (not well) from a recent *New York Times Magazine* article in praise of Martin Luther. The Fellowship of Christian Athletes was the biggest and busiest organization on campus. (The football team had just won a major victory on the previous Friday, and team members were being rewarded by not being required to wear their neckties to class on the day I was there.)

I spoke with some mild curiosity to one of the teachers about the pervasiveness of religious motifs. He replied rather stiffly that the school intended to build character in its students and that it had to remain true to its "founding principles." Obviously he could not imagine building character without making it a *religious* character. That is an ancient belief, of course, but I have visited many Northeastern private schools, most of them founded on religious principles, without feeling the public religiosity that I saw at this South-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ern institution. It was much more openly religious than a Catholic parochial school I visited last year in Providence, Rhode Island.

My own high school used to be visited regularly by Protestant evangelists who used assembly period to preach us rousing sermons on hellfire. When three or four of the boys in the school contracted a social disease by an unwise midnight visit via panel truck to a house of ill fame overlooking the Clinch River, an elderly Protestant minister was hurried in to preach to all the males (specially segregated for that occasion) on the evils of sex, the horrors of eternal hell, and the glories of God who expected even married men to have intercourse with their wives only when they wanted children. In retrospect, what seems most astonishing to me is that no one ever resisted this making of the public high school an adjunct to Protestant religion. We had a handful of Jews and Catholics in our little town, but they went silently along.

Most people still go silently along. It has often been said—and it is true—that Jews in the South have become experts in the art of lying low to avoid calling attention to themselves. The same could be said for college professors. Professors have made little impress on the region. Southern college professors do not go into politics. They do not advise governors or senators. They seldom serve on school boards. They rarely write controversial books about the region. Southern professors do not necessarily originate in the South; now especially they come from all over. But whether they hail from the South or elsewhere, they commonly feel themselves alienated from the surrounding culture and threatened by it. Except in a very few schools, they are miserably paid, even by the standards of a profession never noted for affluence. The social life of most faculty members in any Southern college or university generally embraces only one's colleagues in the institution. Professors feel no reformist impulses for a community that grudgingly allows them only a precarious existence in its midst. With a few brave exceptions, white Southern ministers were conspicuously absent from the Civil Rights movement of the 1960s. But so were all but a tiny number of white Southern professors. The society whose model for communal expression has traditionally been the rousing Protestant evangelical meeting does not feel like a congenial place for the academic enterprise of reflection, dissent, criticism, and reform.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Now huge numbers of people from other regions are pouring into the South. But no one should overestimate the changes they have effected in the region. Like the professors, the outsiders tend to form enclaves in which they talk to themselves and have little to do with the natives. It is easy to be at dinner in a good Southern university such as Emory or Virginia or North Carolina at Chapel Hill or Tulane and have little sense of being in the South at all. The same is true of the atomic energy center at Oak Ridge, Tennessee, or downtown Houston or downtown Atlanta. The outsiders are inserted into the South, but they are not absorbed by it.

A much less frequently noted quality in Southern religion has also had a vast effect on the region. One of the most persistent internal battles of nineteenth-century Southern evangelicals went on over predestination. In some places, that battle continues in desultory skirmishing, and any journey into the back country today will reveal little frame churches tucked away in the ridges and valleys with names that record the relics of doctrinal conflict. "The Antioch Missionary Baptist Church." "The Red Bank Primitive Baptist Church." "The Mt. Pisgah Free Will Baptist Church." "The Oak Grove Hard Shell Baptist Church." These quaint-sounding names in fact reflect opposing views on predestination, a doctrine that has formed the Southern mind perhaps more than any other.

The primitive Baptists and the hard-shell Baptists were rigid predestinarians. They believed in the dictum that has proverbial status in the South, "What is to be will be." Our eternal state is determined before we are born; some people recognize themselves to be among the redeemed and may, at that recognition, experience all the hysteria that I have described above. But salvation remains God's own act, a mysterious, hidden process that human beings are powerless to influence. Predestinarians usually stood against the great Protestant missionary movement of the nineteenth century, a movement so numerically successful that Kenneth Scott Latourette entitled his book on the subject *The Great Century*. The strict predestinarians believed that if God wanted the heathen saved, He would find some way to do it Himself, and that people who tried to redeem the Africans or the Chinese or the Indians or the people of the South Sea islands were flying in the face of God's hidden will.

The "free will Baptists" and the "missionary Baptists" believed in sending missionaries to all the world, and the present Southern Bap-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tist Convention grew largely out of this group. The battle over predestination was not limited to the Baptists, but there it raged most hotly. Modern commentators have given the victory to the advocates of free will since they hold that predestination was uncongenial to the frontier. But this grant of the victor's laurels has been too hastily made, since the doctrine of predestination is much more complicated than it sometimes appears at first sight.

A great many of the missionary churches were just as predestinarian as anybody, and indeed predestination fueled their efforts and their sacrifices. The nineteenth century was not only a great missionary century, but also a great century of apocalypticism among evangelicals, a constant wrestling with prophecy in the effort to know just when Christ would return and this age end in a glorious millennium. The two movements were linked in the widespread conviction that as soon as everyone on earth had heard the Gospel, Christ would split the skies with his Second Coming and the great trumpet blast would roll away time and bring in eternity and judgment. That moment was expected to come as soon as missionaries learned the necessary languages and preached salvation through Christ in the most isolated regions of the world. All of this was bound up with the teaching that history was providentially guided and that the missionaries were tools in God's grand design for the ages. This particular turn of the doctrine was much in evidence at the Southern Baptist Convention of 1981. There, several preachers outlined a campaign of the denomination to see to it that every person on earth has an opportunity to hear the Gospel in the next ten years. No one suggested *converting* everyone; the aim is to preach to everyone so that then Jesus will come.

The State of Israel figures in this great scheme of things, and so we have the strange spectacle of people like Bailey Smith, who do not believe that God hears the prayers of Jews but who do believe that God himself has ordained the present Israeli nation. Gog and Magog will come down on Israel from the north. The world will come to battle at Armageddon. All Israel will be converted to Christ. Jesus will come again. All of this is predestined, and some preachers can spread out charts that show the pattern of God's plan for history. At the Southern Baptist Convention in 1981, word came into the hall that the Israelis had bombed the nuclear installation in Baghdad. Excitement swept the floor, and a prominent fundamen-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

talist minister leaped to the podium to tell the assembly that prophecy was being fulfilled as they sat there, because the Chinese represented Gog and Magog and they would have to come through Baghdad to invade Israel. I did not follow this line of reasoning, but it had a great effect among the thousands of delegates.

Neither predestination nor the missionary movement was a Southern monopoly, but various theologies of predestination circulated with particular vigor in the South. I mentioned earlier that Southerners justified slavery by preaching that it was a divinely ordained system. And I have mentioned the toil and trouble of Southern life for most people who lived it. For most, life was grim, and death came abruptly if not violently. Predestination offered a consolation as great in its way as the fervor of revival preaching. When bad things happened, Southerners leaped to find in the evil some good purpose of God. If they could not see the purpose, the doctrine of predestination allowed them at least to believe that there had to be one. To this day, the Southern funeral in evangelical churches is nearly always marked by emotional references to the inscrutable will of God in sickness, calamity, and death. William Coffin, the former chaplain at Yale University, recently issued a vehement blast in the Yale Alumni Magazine against those who found God's will in the death of his son in an automobile accident. Coffin felt repelled by fellow ministers who wrote him in this predestinarian vein. I suspect that many of these ministers were Southerners, harking back to their ancient comfort that God must be responsible for bad things or else the world is out of control.

These starkly predestinarian doctrines have exercised an influence that has seldom been sufficiently noted as one of the dominant strains in Southern character.

General Robert E. Lee is only one example, but he may serve as a typical case. Thomas L. Connelly has written that "essentially, Robert Lee by his middle age, in 1861, was a child of the seventeenth-century New England mind, and not of the later Enlightenment. In fact, his idea of death as caused by sin, his belief that men's actions are directly controlled by God, smacked more of the pen of Cotton Mather than that of Thomas Jefferson." In describing his military tactics, Lee wrote, "I think and work with all my power to bring the troops to the right place at the right time; then I have done my duty.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

As soon as I order them into battle, I leave my army in the hands of God."

To think of Lee as a predestinarian is to make many things about him more nearly understandable. The predestinarian feels himself an instrument in God's hand, an instrument expected to act, and to act boldly and without the sort of restraint that might make it seem that he doubts that God is in charge of our lives. As an instrument, his duty is to be in the place where he can be used and there to have faith that God use him for the inscrutable purposes for which God guides the world. Predestinarians, whether missionaries among the masses of China or generals in the fields of Pennsylvania, do not make calculations about the prospects of success or failure. Their job is to be at "the right place at the right time," and they expect God to do the rest.

On a hot summer day once several years ago while I was teaching at Gettysburg College, I walked from Lee's position on Seminary Ridge at Gettysburg across the sunny fields to the bloody angle on Cemetery Ridge where the Army of the Potomac threw back Longstreet's Assault on the sultry afternoon of July 3, 1863. I tried to imagine what it had been like, carrying a twelve-pound rifle and a battle pack, trotting across that open land uphill into cannon firing cannister, exposed finally to rifle fire from the low stone wall in front and from the right flank where Vermont boys lay in the wheat and waited for the Southern charge to sweep before them—all that in the deafening noise and acrid smoke of battle in those days and with the temperature standing (so a professor in the college noted) at eighty-seven degrees and the atmosphere building for the terrific thunderstorm that came the next day. Without any of those inconveniences, my walk was long and hot and thirsty, and Lee's orders seemed incomprehensible.

Others had made that long walk before me, trying to rethink the battle and to understand why Lee gave the order to charge over that impossible ground, an order that Longstreet knew would end in failure. The order becomes more comprehensible if we think of the familiar predestinarian mentality, the mind that we find in Martin Luther, in John Calvin, and in the early American Puritans—and in multitudes of Southerners. All life has meaning only as a part of God's plan. If that is true, we must always be willing to act, to put ourselves in the right place in the right time and to do what God

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

commands us to do regardless of the consequences. Neither success nor failure is up to us; God disposes of us as He will. If we willingly obey (as obey we must), we may see miracles. But whatever we see will be God's purpose, mysterious though it may be. We must accept that purpose, bow to it, revere it, and if necessary, die willingly for it.

The predestinarian theme shows up strongly in the rhetoric of Abraham Lincoln, and we have his revealing comment in a handbill of July 31, 1846, where he defends himself against the charge of infidelity: "It is true that in early life I was inclined to believe in what I understand is called the 'Doctrine of Necessity'—that is, that the human mind is impelled to action, or held in rest by some power, over which the mind itself has no control."[5] Lincoln puzzled over such views all his life, and as Richard N. Current has noted, increasingly personified the predestinating power of the mysterious God who ruled the world. He very likely absorbed it from his predestinarian Baptist neighbors in southern Indiana, a region that Everett Dick has said should be included as part of the "Dixie Frontier" because so many Southerners settled there.

Most Southern novelists of the so-called Southern Renaissance of this century have ruminated heavily about predestinarian themes—Faulkner perhaps above all. It would be interesting to count the times he uses words such as "fatality" and "destiny" in his works. Many of his characters seemed doomed from the start by some dark fate that drives them to destruction. Cleanth Brooks noted two decades ago that Joe Christmas in *Light in August* "is something of a fatalist, and his fatalism is a kind of perversion of Calvinist determinism."[6] I would argue that the same sort of determinism drives Sutpen in *Absalom, Absalom!,* Quentin in *The Sound and the Fury,* and young Bayard Sartoris in *Sartoris* (alias *Flags in the Dust*). In Faulkner, it sometimes appears that predestination has remained even after belief in God has gone and that therefore the implacable destiny that drives many of his characters along seems not comforting but melancholy and pointless.

Although logically it may seem natural to interpret predestination passively, historically, predestinarians have nearly always loved the decisive act that allowed them to make some irrevocable commitment to God's mysterious will. At times, it looks as if the predestinarian *must* stake all on a single, bold act to confirm his own stern

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

beliefs to himself. *Not* acting, leaves one in a state of perpetual bemusement. Acting and obtaining the occasional miracle confirms predestination and maintains belief in the doctrine during those long intervals when miracles mysteriously do not happen.

Yet Southern action seems always dedicated to preserving something that is old—or presumed to be old—rather than effecting some dramatic change. It is defensive action, not revolutionary action. Military historians have frequently pointed out that the Southern armies were experts on defense, yet clumsy and without purpose on offense. From the beginning of the war, when, after First Bull Run, Washington might have been occupied with scarcely a fight, the Confederates held back, not knowing how to take advantage of a stupendous victory, ill-equipped to launch an offensive with a clear goal that might allow some radically new prospect. The Baptist fundamentalists firmly believe that they are preserving a religion that always has been, and they labor mightily against novelty.

All this is to say that the predestinarian current may account for the notorious Southern dislike of any change and for the conservatism of many of the poor who might appear to profit most by change. Roy Acuff, the so-called King of Country Music, ran as an anti-New Deal Republican in the gubernatorial race in Tennessee in 1948. It mattered not that Tennessee had been the state most helped by the Tennessee Valley Authority. TVA had made it possible for Roy Acuff's impoverished people in mountainous Union County to put away their coal-oil lamps and to listen to the Grand Old Opry out of Nashville on radios they could plug into sockets that took power from nearby Norris Dam. Acuff lost, but he made one of the best showings any Republican candidate had made in years. Country music is filled with lyrics of poverty and woe, but its artists probably represent their constituencies in their general political conservativism. Their religion holds that God has made the world as it is, and their songs suggest that Christians should endure the world rather than attempt to change it. The folk songs of union-building, protest, and revolution so popular on college campuses have never had any place in the country music repertory. It is far too simple to claim that the reason for this absence lies in the crass "Nashville Sound" hucksterism that was so thoroughly satirized in the movie *Nashville*. The original audience for country music singers did not believe in political change, and their reasons were thoroughly religious. Their min-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

isters preached that blacks were ordained to be hewers of wood and drawers of water. But those same ministers also preached the virtues of poverty, attacked labor unions, and counseled hope not in this world but in the world to come, and left poor whites without the consciousness that their lives could ever be different.

The successful country music singer may take his or her sudden wealth and fame as a mysterious gift of God, and some of them have reputations for generous private charities—paying for an operation here or there, helping a child through school, doing something else to help this or that individual. But nothing works to make these people seek to better the lot of the group whence they sprang by any sort of collective action, political or otherwise. Hollywood has engendered an amazing number of charities and reformist political and social organizations; Nashville has not. Southern whites are seldom able to imagine that carefully organized human action can improve the world, and they are likely to suppose that any such activity is not only a waste of time but probably a conspiracy by somebody hoping to make a profit on someone else's gullibility. "The poor ye have always with you." This remark of Jesus in the Fourth Gospel was probably nothing more than a recognition of contemporary reality. But Southerners have raised it to the status of near command so that it is interpreted by most of them—even the poor—to mean that poverty is a changeless part of the predestined plan of God for this world.

The Southern evangelical tradition has churned up the occasional populist who took a radical tack—men like Georgia's Tom Watson and Louisiana's Huey Long. But in their devotion to the small farmer and in their relentless quest for personal power, their radicalism looks somehow backward, futile, and failed. The white Southern agrarians have always been better at romantic rhetoric than they have been at reading the future. They have so quickly become corrupt because their Jeffersonian ideal of small-farmer democracy proved itself quickly impossible, and its populist prophets had no recourse but demagoguery—the fate of prophets who lose their faith.

Their tradition makes Southerners apt to throw themselves only into those causes that demand exuberance or even frenzy and allow them to stake the future on some great act or some spellbinding pronouncement. For this reason, they have always been avid soldiers,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and they are more likely than most other Americans to demand military solutions for complicated international problems. Tennessee, asked to send five thousand soldiers to the Mexican War, sent forty-five thousand and earned the nickname "Volunteer State." The first American soldier killed in Vietnam was a Tennessean. Lots of other Southern boys died later on there. Gloria Emerson traveled extensively throughout the South to write her book *Winners and Losers.* Even among those who had lost much and despised the war, she found a strong general sentiment that it had been wrong to oppose the war in demonstrations or in any other meaningful political way. I recall that Lieutenant William Calley was cheered in the streets of Gatlinburg, Tennessee, when he visited there after news of the My Lai massacre had broken and he was about to face court-martial. There is more to this acceptance of the military than the mere habit of the outdoor life in the South. It is a deeply fixed habit of mind which holds that things are as they are because they *must* be that way, and deep within this individualistic society there is a force working against the idea that individuals have any real responsibility. Somehow destiny does it all. The soldier who wears his country's uniform and risks his life and in war does some horrible thing is somehow a tool in a destiny that brooks no human questioning. He has practiced obedience, and obedience remains one of the great Southern virtues.

Southerners do believe in individual salvation, but it must come all in a blinding flash of divine light. The redeemed person, the person who "gets religion," is transformed in an instant. But the idea that a personality can be changed by some long exercise of the will and by changing habits is not congenial to Southerners. One of the most astonishing things to me about the Northeast is the alacrity with which the middle classes take to psychological counselling and therapy. After six years I am still unaccustomed to the casual way in which people speak of "my therapist" as if everyone has one. From what I see in the daily *New York Times,* techniques of psychological therapy seem as newsworthy as reviews of new-model cars in the automotive section or descriptions of distant lands in the travel section.

I have no statistics on the relative frequency with which middle-class Southerners seek psychological counselling. But my strong impression remains that outside of the northern enclaves in the South,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

psychologists and psychiatrists do not fit into the common middle-class landscape. Part of the reason may be that Southerners simply cannot afford such services. But I suspect a larger reason is the skepticism Southerners have that people's habits and personalities can be changed in the way psychotherapy assumes possible. If change comes, it cannot be planned or guided; it will happen as part of some general destiny, and that will be that.

Southerners prefer extravaganza and the quick fix. They can bring their camp-meeting fervor to such enterprises, and if they get to the right place at the right time, God may work a miracle. But if the miracle does not happen, they do not know what to do. Many commentators have pointed out that Lee's invasion of the North culminating in the disaster at Gettysburg was motivated by no grand strategy. Lee was not driving on Washington, as is commonly supposed. He had no precise military objective. He thought only that if he invaded Pennsylvania, something good might come of it.

Nothing in Southern history over the last century demonstrates any talent for city organization, for working out taxation that comes even close to being fair, for preventing the uglification of the land, for fighting pollution, for developing any workable system of public transportation, for taking care of the poor, for doing anything that requires a deep concern for the community as a whole and long-term planning and a willingness to endure slow fruition of rational effort.

Southern schools from first grade through college suffer from a poverty and a neglect broken only here and there by imaginative efforts to do something to make things better. Ross Perot, the billionnaire businessman, heads a commission charged with discovering how to improve the high schools of Texas. His recommendation: limiting participation in athletics, drill teams, and band practice to weekends. He does not think children should participate in these extracurricular activities unless they are passing their academic subjects. He wants to make children do homework in their academic studies. His recommendations have blown up a tornado of indignation throughout the state. Because of its oil wealth, Texas has done better than any other Southern state in higher education. But I wonder if Ross Perot can battle successfully against a Southern tradition doggedly committed to values so opposite to those that make for good schools. In other parts of the country, education has been seen as a necessary good for the community as well as a ladder for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the climb to success by individuals. In the South, hardly anybody thinks of making the community better, and education has traditionally been regarded as subversive if it is given to the wrong people. Ross Perot has got himself into a hard fight. In most other Southern states, the fight has not yet begun.

For this Southerner at least, the South just now is a discouraging place. Economic change is sweeping the region, but there is little change in sensibilities. Southern whites hate to admit even that there should be any change in sensibilities to meet the social and economic revolution that is upon them. They remind me a little of the story Vance Packard tells of the Victorian bride who chloroformed herself on her wedding night, leaving a note to her husband pinned to her nightgown: "Mamma says you can do anything you want." Few white Southerners want to take an active role in directing the new world that is on them already; they want it to happen while they go on pretending that all the important things are just the way they always have been.

We all know how easy travel is nowadays, and we suppose that travel has changed the way people think. But most Southerners do not travel, and those who do, manage to return to their homes relatively unchanged. Not long ago, an archaeologist friend of mine was telling me of an expedition he had made in the South twenty years ago seeking artifacts from early Indian settlements there. He had been entertained by a Southerner who regularly went to New York to see opera and the ballet. This gentleman said to my friend, "I guess you don't like the way we treat our niggers down here, do you?" This man has his well-traveled spiritual kinsmen all over the South today, even after so much has happened. The faith that travel—even frequent travel—necessarily broadens the travelers and makes them more humane and tolerant is only a quaint academic superstition.

Not surprisingly, the most hopeful signs in the South come from black Southerners. In thirty years they have effected a revolution, and they are not done with it yet. Their own religious tradition taught them exuberance, but they somehow managed to escape the sense of gloomy predestination that has paralyzed the ability of Southern whites to think new thoughts and to take hold of the future. The new political awareness of blacks has taught them how to organize for change and how to work at change in the patient bu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

reaucratic ways that make true revolutions endure. Despite all they have suffered, despite the jails and the biting dogs and the bombings of Birmingham and the segregated, private "Christian schools" that have sprung up like rank weeds in many parts of the South, and despite the enduring poverty of Southern black families, they have managed to come into this time with a gentleness that ought to make white Southerners astonished, humble, and grateful.

A few months ago, I visited a nearly all-black high school in a large Southern city supposedly integrated. (I was told that there were three white children in the school, but I did not see any of them.) I attended four classes throughout a rainy afternoon. In every one, students wanted to know who I was and what I was doing there, and their teachers genially asked me to explain myself to the classes. When I told who I was and what I was doing (and identified myself as a Tennessean), I was greated with warmth and generosity. From time to time in this class or that, the exuberance of some students momentarily disrupted things. But at least three times in three different classes, somebody called out, "Hey, let's settle down. We've got company today." And they settled down, laughing, looking at me as if I were some relative come to visit.

The statement that we have company today makes sense only when people feel something of the community that school at its best should be. It was a sentiment that I scarcely felt at all in the public schools of Providence that I visited in 1983. This Southern school was housed in a dreary institutional building that looked as bleak as anything I have seen in the North. It had the long corridors and the crowded classrooms. But there was a different mentality there, and feeling it made me cautiously optimistic. I talked to a lot of these kids between classes and after school, and I talked to their teachers and to their principal. What were they going to do in life? Many of them—both young men and women—planned to join the army. Nearly all of their peers planned to do something to get a further education after high school. They also planned to stay in the South. Everyone I talked to still had hope and purpose and expected to make something of themselves and their world. They know change is coming; they expect to ride it and not to be ridden by it.

Wherever I have gone in the South and talked to blacks, I have found a similar consensus among them that they had something to gain in this society and that they were resolved to make something

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of themselves and of it. They are in no mood to accept an inferior place; but neither are they in any mood to crush their old foes.

No one but a fool can imagine that the confidence of black young people in the South, the new feelings of pride and dignity that they have, can suffice to roll every barrier away and bring in equity and justice overnight or even within a decade. But the new black confidence, the political awareness of both leaders and the common people, the willingness to accept change and to organize it and direct it—all these things are new in the South. And they offer reasons for hope.

It may be one of the great historical ironies if the South rises again only as an exuberant, dedicated, and hopeful black population pushes aside the old white fatalism and finds its own place in the world, and finds also in the search a new place for Southern whites.

ENDNOTES

[1]Everett Dick, *The Dixie Frontier* (New York: Capricorn Books), 1964, p. 279.
[2]Frederick Law Olmsted, *The Cotton Kingdom*, vol. 1 (New York: Mason Brothers, 1861), p. 269.
[3]Ibid., p. 13.
[4]Thomas L. Connolly, *The Marble Man: Robert E. Lee and His Image in American Society* (New York: Knopf, 1977), p. 199.
[5]Quoted in Richard N. Current, *The Lincoln Nobody Knows* (New York: Hill and Wang, 1958), pp. 59, 71.
[6]Cleanth Brooks, *The Hidden God* (New Haven: Yale University Press, 1963), p. 38.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Victor F. Weisskopf

The Frontiers and Limits of Science

WHAT IS SCIENCE?

SINCE THE BEGINNING OF CULTURE, man has been curious about the world in which he lives; he has continually sought explanations for his own existence and for the existence of the world—how it was created, how it developed and brought forth life and humankind, and how one day it will end. Early ideas on the subject were developed in mythological, religious, or philosophical frameworks. All these ideas have a common characteristic: they are directed to the totality of the phenomena; they want to account for everything that is. They intend to present the absolute truth by attempting to give immediate answers to the fundamental questions of existence: "Why is the world the way we find it? What is life? What is the beginning and the end of the universe?"

Several hundred years ago, human curiosity took a different turn: instead of reaching for the whole truth, people began to examine definable and clearly separable phenomena. They asked not "What *is* matter?" and "What *is* life?" but "What are the properties of matter?" and "How does blood flow in the blood vessels?"; not "How was the world created?" but "How do the planets move in the sky?" In other words, general questions were shunned in favor of limited ones for which it seemed easier to get direct and unambiguous answers.

Then the great miracle happened. The restraint was rewarded as the answers to limited questions became more and more general. The renunciation of immediate contact with absolute truth, the detour through the diversity of experience, allowed the methods of science to become more penetrating and their insights to become more fundamental. The study of the moving planets led to celestial me-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

chanics and to an understanding of the universality of the gravitational law. The study of the effects of heat led to the general laws of thermodynamics. The study of the twists of frog muscles and of voltaic cells led to the laws of electricity that were found to be the basis of the structure of matter. By means of this detailed questioning, a framework was created for understanding the natural world. Thus, something like a scientific world view arose in the twentieth century, a synthesis of scientific insights gained over the previous five hundred years.

The world view of natural science differs in two important aspects from the religious, mythological, and philosophical ones. First, it does not directly contain concepts that are connected with the "human soul," such as faith, awe, desolation, happiness, good and evil, and so on. But it does contain these concepts in an indirect way. They appear as manifestations of certain neurophysical processes in the brain.

Second, the insights are "tentative"; they are considered as incomplete perceptions, as parts of a greater truth hidden in the plenitude of phenomena. The insights are not based upon dogmatic principles, revealed to us by divine inspiration, or by some internal sparks of full recognition. What is perceived as "scientific truth" is steadily revealed in partial steps, sometimes big ones, sometimes small ones, and sometimes even steps backward. Some recent knowledge will turn out to be mistaken. It was rare in the past that insights turned out to be outright wrong, but some of them became and will become too limited, not general enough, misconceived, or awkwardly formulated; some will appear irrelevant in view of future deeper insights.

TEN STEPS IN THE DEVELOPMENT OF THE SCIENTIFIC WORLD VIEW

Here is a selective "al fresco" description of today's scientific world view. We may distinguish ten steps:

1. Unification of celestial and terrestrial mechanics
2. Existence of atomic species

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

3. Heat as atomic random motion
4. Electricity, magnetism, and optics having a common root: the electromagnetic field
5. Evolution of living species
6. Relativity
7. Quantum theory
8. Molecular biology
9. Quantum ladder
10. Universe

The first step put an end to the previous widespread belief that the heavens are governed by different laws than the earth. The second step, taken at the end of the eighteenth century, led to the recognition that the immense varieties of matter in different forms are the result of combining only ninety-two different species of atoms. The third step is one of the few examples in the history of physics where an important concept was found to be fundamentally wrong; it was the idea that heat is some substance different from ordinary matter, which was named "phlogiston." The fourth step was one of the great triumphs of nineteenth-century physics, when such seemingly disparate phenomena as electricity, magnetism, and light were found to be manifestations of the same agent. The fifth step, Darwin's theory of evolution, explains how purposeful and goal-directed events occur in a world governed by laws that are devoid of it.

We now come to the insights of the twentieth century. Einstein's theories of relativity imply the unity of time and space, mass and energy, inertia and gravity. A better term for his ideas would be "absolute theory," since they allow us to formulate the laws of nature independently of any system of reference; that is, in an absolute sense.

The seventh step is the most revolutionary of all. Quantum mechanics led to the recognition that there are limits in the atomic realm to the application of "classical" concepts such as location, energy, velocity, momentum. These limits are codified by the famous uncertainty principle of Heisenberg. This principle acts as a signpost indicating how far classical concepts can be applied. Beyond these

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

limits we encounter specific "quantum states," which are not describable by the classical system of concepts. The quantum states, however, are the basis of our understanding of the character of atomic systems, and in particular, of their stability and specificity, which are pervading features of our environment. It explains why atoms and molecules keep their identity, their shapes, and their patterns in spite of collisions and perturbations, why gold is gold wherever we find it, and in the last instance, why the same flowers bloom every spring. Heisenberg's principle, therefore, should be called "the certainty principle," because it makes it possible for the atomic quantum states to exhibit well-defined definite properties. This name, together with "absolute theory," could have prevented a lot of philosophical abuse.

The eighth step, molecular biology, has revealed the molecular processes that are responsible for the development and reproduction of living species. At present, this field is in the process of enormous expansion. The seminal idea was the recognition of the DNA macromolecule, which contains the code for the production of proteins, the substances that keep the life process going. We are still far from a complete understanding of the functioning and the development of living entities, but those ideas are being steadily expanded; almost every month we hear of some new insight into the chemistry of life.

The ninth point, the quantum ladder, deals with a hierarchy of material systems discovered since 1930. It stems from a typical consequence of quantum mechanics: the size-energy relation. In a somewhat simplified way, it says: the smaller the system, the higher the threshold energy from the lowest quantum state to the next higher one, the higher is the energy necessary to activate the system. For example, if we want to change the internal quantum state of an atomic nucleus, we must make use of much higher energies than those necessary to change the states of the atom. Only after the invention of cyclotrons and other particle accelerators that could deliver millions of electron volts was it possible to set nuclear processes into action. A new realm of phenomena was uncovered; nuclear transformations, radioactivity, fission, fusion, and so on. That realm remains dormant in an environment that cannot provide the required energies, such as the terrestrial one, except when man transcends these limits. It is active, however, in the center of the stars, where the tem-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

perature is high enough to overcome the nuclear threshold and to initiate nuclear reactions. These are the reactions that provide the power needed to keep the stars shining. A new force of nature makes its appearance, the nuclear force; it is the agent that keeps protons and neutrons together within the nucleus.

When even larger accelerators, providing billions of electron volts, were constructed, another realm of phenomena was discovered: the next higher rung of the quantum ladder. It revealed that the proton and the neutron are also composite systems; their constituents seem to be the "quarks," held together by a new type of force with the uninspiring name "strong force." Indeed, the above-mentioned nuclear force between neutrons and protons may turn out to be a weak effect of these "strong forces," just as the chemical forces that keep the atoms together in molecules and solids are a weak effect of the electric force that holds the electrons tightly within the atoms.

The manifestations of the internal dynamics of the protons and neutrons include the existence of many excited quantum states of the proton and the neutron, new forms of radioactivity, new types of short-lived particles (the so-called mesons), and copious production and annihilation of antimatter. Antimatter is another form of matter consisting of antiparticles having opposite charges of ordinary particles. Antimatter can be created together with matter when sufficient energy is available to do so. According to Einstein, the energy contained in an entity of mass m is mc^2, where c is the light velocity. Conversely, when matter and antimatter collide, they are both transformed into some other form of energy, for example, radiation.

The energies necessary to activate the phenomena of that highest realm are rarely available in the universe. That is why it is dormant even in the interior of ordinary stars. In all probability, it may play a role in some unusually hot stars, and did so during the first instances of the big bang.

We do not know whether this is the last rung of the quantum ladder; higher rungs may exist. The quarks, of which we already know five different types, may be composite systems, with an even higher threshold; there may exist an internal dynamics within the electron, dormant at currently available energies.

We now come to the last step in our description of the scientific world view, the universe. During this century, a number of discoveries widened our insights into the nature of the universe as a whole.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

One was the discovery of a steady expansion of the world at large, a fact from which one was led to conclude that there had been a beginning when matter was extremely hot and highly compressed. Perhaps the most uncanny discovery was the observation of a faint radiation seemingly filling the whole of space, with all the properties expected from an optical echo of this early beginning still reverberating through space.

There is a widespread misunderstanding about the primal bang: it was not a localized phenomenon that started at a certain point in space and then expanded into the rest of the universe. The initial state of extreme concentration and temperature existed all over space, at all locations. The expansion that followed it should be considered instead as a deconcentration or a decompression at all points of space.

Other discoveries in the depth of the universe revealed stars or star formations of a very uncommon character. The "neutron stars" seem to consist of matter billions of millions times denser than ordinary matter; the "quasars" seem to be galaxies emitting a billion times more energy than normal galaxies; the "black holes" seem to be extremely dense concentrations of matter around which the space is curved to such an extent that matter and light can only get in but not out. In spite of the odd character of these objects, they probably still are phenomena that can be understood on the basis of our present knowledge of the properties of matter and space.

The discovery of the optical reverberation of the primal bang must be regarded as an uncanny confirmation of the hypothesis that the world began more than ten billion years ago. Perhaps it was a "new beginning," since, with our present knowledge, we cannot exclude the fact that the observed expansion may be followed by a subsequent contraction, ending with a hot concentration of matter, which would then be the beginning of a new expansion, repeating itself endlessly. The recognition of a beginning of this sort is the culmination of a development that has brought a historical aspect into the physical sciences. With the exception of geology, the physical sciences were for a long time nonhistoric; matter was studied in its present state and its history was not touched. Today, the history of matter is an important concern.

Our present ideas of that history are intimately connected with the hierarchies of material systems that represented the rungs of the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

quantum ladder. The ladder ranges from ordinary chunks of matter to molecules and atoms, then to nuclei, then to the constituents of nuclei and—finally, as of today—to the quarks. The development of the universe went in the opposite direction, down the quantum ladder, as it were. It was a progression from the elementary to the composite, from the less complex to the more complex.

Far in the past, the primal bang occurred that created the elementary particles of matter in a hot state of high concentration and energy; quarks and electrons were formed; later on, in the process of expansion and cooling, the quarks combined into protons and neutrons; the latter ones and the electrons combined into atoms of hydrogen and helium; gravitational bunching of these atoms gave rise to the formation of stars and galaxies; in the center of stars, more complex atoms than hydrogen and helium emerged. Some stars were surrounded by planets where rocks, metals, and condensed matter of all kinds were formed. Under the benign influence of a nearby star like the sun, certain molecules combined to macromolecules on the surface of some planets; some of these macromolecules were able to reproduce themselves, which led to the development of cells, of multicellular species, and finally, of sentient beings.

Many steps in this history are still shrouded in a veil of ignorance and guesswork, such as the original production of quarks and electrons after the primal bang, or the detailed steps of the development of life on our planet. This evolutionary history of the world, from the primal bang to the present universe, is a series of gradual steps from the simple to the complicated, from the unordered to the organized, from the hot, formless gas of elementary particles to the cooler structured atoms and molecules, and further, to the still more structured liquids and solids, and finally to the sophisticated, self-reproducing living organisms.

This development is by no means contradictory to the second law of thermodynamics, which requires a continuing decrease of order. The increase of order and structure at certain restricted spots in the universe was more than compensated by the steady flow of radiative energy into the void during the process of cooling down. The dissipation of that radiation in the depths of space represents much more disorder, in the sense of the second law, than the established order, wherever matter assembled and formed organized structures, whether living or dead.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE TWO FRONTIERS OF SCIENCE

Natural science develops along two fronts. The first may be called the internal frontier. It is the study of the consequences of atomic interactions. The nature of these interactions is known in principle: it is the electric interaction between atomic nuclei and electrons, regulated by quantum mechanics. The consequences, however, are so manifold and complex that their study was and continues to be the object of a widening frontier of research ever since these interactions have been understood.

There are good reasons for the complexity of the atomic world. Atomic structure permits a tremendous number of combinations and recombinations of atoms, by forming a large variety of specific structures and superstructures. The aptitude for combining is based on the specific patterns of electron quantum states; they allow for innumerable combinations and interlacings of atomic units.

The manifestations of atomic combinations range from the well-known properties of crystals, metals, liquids, and gases to new phenomena appearing only under special conditions, such as the superconductivity of metals and the superfluidity of liquids at very low temperatures, or the phenomena of a special state of material aggregations called "plasma," which occurs at very high temperatures or very low pressures. The physics of surface films also belong to this category. More and more phenomena and material properties are found, explained, and exploited on that frontier, which comprises the largest part of modern physics and chemistry.

Today, even a good part of biology should be put into this category, in particular, molecular biology. The stability of DNA is based upon the quantum states of its constituents. Thus, in principle, the mechanisms of heredity, the growth of living structures, and the evolution of different species are subject to the same laws that govern the relations between atoms and molecules.

All phenomena originating from the interaction of atoms are based upon the quantum mechanics of electron motions under the influence of electric forces. We have no reason to doubt it. But this is only a statement of principle. In order to deal with the vast array of these phenomena, special concepts had to be introduced at every step, such as temperature, entropy, chemical bond, viscosity, gel, and many others. In particular, when we get nearer to the living world,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the approaches and the modes of description are very far from those revealed by the underlying principles. We speak of genes, proteins, enzymes, hormones, and so on. When we come to the studies of the brain and its actions, the concepts and terminologies are even further away from the basic structures of electronic quantum states.

Still, much has to be learned in order to get good insights into the complex and involved phenomena of the world of atoms, molecules, liquids, solids, plasmas, molecular chains, and living entities. We face problems of the relations between different aggregates of atoms or molecules, ordered and unordered, of the modes of transition from one structure to the other. Real understanding implies the distinction between the essential and the peripheral. Only when we reach such an understanding—when we are able to separate the relevant from the irrelevant—will the phenomena no longer appear complex but intellectually transparent.

We now come to the second frontier of natural science, which may be called the external frontier. It deals with the higher rungs of the quantum ladder, with the explorations of those realms of nature that lie beyond currently understood principles. We know for sure that the atomic realm is based upon the well-known electric forces between electrons and atomic nuclei. But the forces between protons and neutrons, the forces between quarks, and the forces that regulate radioactive decay are not yet as satisfactorily established. These are the frontiers of nuclear physics, of particle physics, of certain parts of astronomy and cosmology. In all these fields we deal with nonterrestrial phenomena that are activated by energy exchanges much larger than those taking place on earth. It needed miraculous feats of technical skill to realize those extraterrestrial conditions on earth, or to observe those phenomena in the universe by using radio-eyes, X-ray eyes, and other vastly extended human sense organs. A whole new world of unexpected phenomena is being discovered in the very small and in the very large; in the manifestations of the dynamics of all those short-lived quark combinations as well as in the far reaches of the extragalactic universe.

The discoveries at the external frontier are of importance not only because they reveal entirely new ways of natural behavior, but also because they may lead to a deeper understanding of our own terrestrial world. For example, we have no idea yet why the electric charge of the electron has a definitive value just opposite to that of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the proton. This value is a decisive factor governing the behavior of the atomic world. If it were much larger or much smaller, our world would look and behave quite differently. Furthermore, we are totally ignorant with regard to the reason the electron mass is about two thousand times smaller than the mass of the proton and the neutron. It makes the atomic nuclei very much heavier than the electron. The lighter the mass, the more diffuse are the quantum states. As a consequence of this, the atomic nuclei occupy well-defined positions within the molecules, whereas the quantum states of the electrons are spread out over the interspaces between them. The nuclei, therefore, form a kind of skeleton within the molecules, which gives rise to what one may call "molecular architecture." It represents the typical spatial arrangements of atoms within the molecules that are the basis of much of what is going on in our environment. The helical structure of the DNA molecule—the coil of life—is an example. The deeper reasons for that decisive mass ratio may at some time be found at the external frontier of particle physics. It is not known today.

An equally important question to be solved by further study of the basic particles refers to the relation between the fundamental forces of nature. At present we can identify four of them: electromagnetic forces between electrically charged particles, "strong" forces between quarks, the so-called weak forces responsible for radioactive phenomena, and the force of gravity. There are strong indications that the electromagnetic, the weak forces, and perhaps also the strong forces are intimately related to one another.

INTERNAL LIMITS OF SCIENCE—THE CREATIVITY OF NATURE[1]

Are there limits to the power of scientific insight? Are there any phenomena or experiences that may never be accessible to explanation or comprehension with the methods of science? Evidently, many phenomena and processes in nature outside and inside the human mind are still far from understood by contemporary science. The question arises, however, whether there are limits of scientific explanation that will never be transcended.

To make predictions is difficult, especially when they concern the future, as a Danish humorist said. Nevertheless it will be argued that

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

such limits indeed exist. There are two rather different kinds of limits, internal and external ones; these terms refer to the relation of the limits to the conceptual system of science.

There are three aims of science: *comprehension, explanation, prediction*. Comprehension indicates the presence of a general idea of how a phenomenon comes about, what its general causes are, and how it is related to other parts of the natural world. It implies a demystification of the part of the natural world to which the phenomenon belongs. Explanation goes further; it tells us why the phenomenon or the process under consideration runs one way and not otherwise. Prediction, of course, is even more specific: it tells us what will happen to a well-defined system in the future when certain conditions are fulfilled. There is also such a thing as a prediction of the past, "retrodiction," when conclusions are drawn with regard to the yet unexplored previous history of a given set of objects.

The internal limits of science apply only to the possibilities of explanation and prediction. They do not restrict comprehension. The reasons for these limitations can be subsumed under the term "amplification effects," which implies that very small causes sometimes have very large effects. A simple example indicates what is meant. Consider the fate of a single molecule in a gas, say, in the atmosphere. Can we predict the fate of the molecule in the course of time? The answer is definitely in the negative. Very small changes in the initial conditions are quickly amplified at each collision with other molecules. Even if we knew its initial condition with great accuracy, its final position would be practically impossible to determine. Furthermore, quantum mechanics puts a limit to the accuracy of initial conditions.

This limitation does not seem worrisome. Who cares about the fate of a molecule? It is not relevant to the behavior of the gas. We care about pressure, temperature, the fluctuations of density, and so on, all problems for which the fate of one single molecule is irrelevant.

Similar examples are found in the development of star systems. The laws of gravity require the formation of clusters in the primal hot gas of the early universe. Small density fluctuations grow by attracting neighboring gas molecules. The larger clots are even more powerful, to attract more material. By this amplification process, the originally uniform gas separates into ever-increasing groups, which

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

at a later time develop into galaxies and galaxy-clusters. It is impossible to predict the exact nature of cluster formation, although one can predict that clusters must be formed due to gravitational amplification of small density fluctuations. Here, the situation is already more interesting: Nature creates new shapes that cannot be predicted from the laws of physics, except in very general terms. We may be able to understand the occurrence of spiral arms and the like, but not the immense variety of details that we admire when we look at pictures of galaxies. They are examples of the creativity of nature.

Geology presents many instances of amplification effects. One example is the shape of mountain ranges. We comprehend the formation of such ranges by tectonic activities of the earth crust, but we cannot explain why Mt. Blanc has the specific shape we see today, nor can we predict which side of Mt. St. Helens will cave in at the next eruption and what its shape will be afterwards. The resulting mountain shape will be an example of nature's creativity. It should be added that the geological sciences allow a good deal of retrodiction: many hypotheses on the development of our planet can be verified or falsified by searching for evidence concerning past events.

Things become more critical when we consider biological processes. In order to emphasize the difference, let us consider two experiments with a beam of X-rays. In the first, a crystal is exposed to it; in the second, a living bacterium. The effects on the crystal can be rather accurately predicted, since it is completely irrelevant by which atom the X-ray photon is absorbed. The effects on the bacterium, however, depend critically on the particular atomic group in the gene carrying part of the cell that is hit by the X-ray photon. Here, it is essential where it has hit, but it is unpredictable. Of course most such hits are detrimental or do not produce much change. But some may lead to the development of an offspring that is better able to cope with the environment. It is well known that such changes are retained and may displace the previous bacterium by the processes of replication and natural selection. Again, we have here a case of a relevant amplification process. In general, of course, changes in the genetic constitution of a cell or a living species are introduced by many other causes besides X-rays, but always as an unpredictable molecular process with macroscopic consequences. These are typical examples of amplification effects.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The explanation of the specific paths of evolution is made all the more difficult because of the enormous number of possible combinations of nucleotides that make up the genetic constitution in the well-known DNA chain of molecules. It is true that the number of viable combinations is considerably smaller, but it is still very much larger than the number of those realized in nature. Therefore, it is impossible to explain why certain combinations are realized and not others, or to predict future evolutionary changes. Thus, again, the formation of the actual living species is an unpredictable act of the creativity of nature. We comprehend the general trend but we cannot explain the specific events. Just as in geology, bioevolution also admits a certain amount of retrodiction. Indeed, much of the supporting evidence rests on successful conclusion of what would have to be found in fossils and how certain kinds of biochemical processes evolved by natural selection.

The evolutionary amplification effect acquired a new twist when the nervous system and the brain evolved. It represented a new way of communication between the external world and the living being. Although the phenotype was still determined by an amplification of the microstructure of the DNA, its behavior pattern depended as well upon the reaction of the animal to sensual impressions. It also represents an amplification process, the microprocesses in the sense organs causing large-scale actions and reactions of the living beings. The interrelations between sensory input and behavioral output are most intricate because of the phenomenon of memory. It allows arbitrary time intervals between cause and effect, and permits a process called "learning," in which the relations between input and output become more and more sophisticated during the lifetime of an individual. It is an amplification system of a higher order, which makes it more difficult for scientific explanations or predictions of specific events. However, there should be no limit to the deepening scientific comprehension of the neurological and psychological factors involved.

With the development of the human species, a new feature entered: cumulative learning. It led to the development of new patterns of behavior quite different from those observed before. Previously, the behavior of an animal species remained essentially unchanged over very many generations, in spite of some learning. The death of an individual erased its learned experiences. Changes

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in behavior were caused mainly by changes in the natural environment or by genetic changes. Now, cumulative learning was possible; the death of an individual no longer erased the learned experiences because of the emergence of language and documents. It led to the formation of autonomous structures within the behavior patterns of the species; we call them cultures and civilizations. They evolved and decayed, but developed steadily toward higher degrees of sophistication. The cultural evolution differed from the biological one by its much faster time scale. It did not wait for changes in the natural environment or in the genes. The governing principles were no longer exclusively the survival of the species but also the survival of what we may call ideas.

The amplification process has reached its largest extent. Individuals have the capacity to influence the course of the cultural evolution; they themselves are the products of the amplification of genetic, environmental, and cultural causes.

The difficulties encountered in efforts to explain and to predict become greater the more complex are the entities considered in the hierarchy of nature. The development of stellar systems or the properties of rocks, minerals, and mountain ranges are examples of amplified effects of small causes in the past history of the objects themselves. In the realm of life, we find amplified effects of cause that acted not only upon the object, but also upon the ancestors of the objects under consideration. Moreover, when the brain comes in, we must add the amplified effects of the environment on the sense organs. Finally, when we arrive at the emergence of humankind, the effects of individuals upon the course of events become relevant. These are the reasons a good part of the life sciences and most of the social sciences are more descriptive than predictive. It does not exclude the recognition of general trends or laws, but in so many biological and human phenomena, it is the specific that is relevant and not the general.

We must, however, avoid one misunderstanding. The occurrence of unpredictable events does not mean that the laws of nature are violated. On the contrary, the actual causes and the mechanisms of amplification are no "miracles" from the scientific point of view; they are comprehensible but unpredictable. This is why we called these limits the internal ones. Indeed, the laws of nature require that such amplification effects occur under certain conditions, like those

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that exist when life develops or when galaxies are formed. Once the amplification of some microscopic event has taken place, the chains of events that follow can be reasonably well predicted in many cases. The scientific approach does have some predictive power in respect to what will happen after the unpredictable event has occurred, a power that will increase with the further evolution of science. This is certainly true in the nonliving and in the biological realms; it may be questionable in the social realm, since the interference of individuals into the course of events becomes essential.

EXTERNAL LIMITS OF SCIENCE—HUMAN CREATIVITY

The development of cultures and civilization among the human species has brought about a new escalation of possibilities and therefore a new barrier to any scientific predictability. Let us consider a specific form of cultural expression, books and paintings, in order to make a few quantitative considerations. The possibilities of combining words into a book, or color elements into a painting, are so enormous that their number would be overwhelmingly greater than the number of all possible gene combinations. Of course, the number of word or color combinations that make "sense," in any definition of the term, is very much smaller, but it is still vastly greater than the number of possible viable biological species. Evidently, the existing books and paintings represent only a negligibly small part of them. That is why the scientific method encounters even more important limitations when it is applied to the creations and expressions of the human mind. We call these limitations external; they are extraneous to its own conceptual system. A special concept characterizes these limitations, the concept of complementarity.

There are important and relevant phenomena in human experiences that are "complementary" to scientific description. The concept of complementarity acquired a more focused significance when Niels Bohr used it to describe situations in which there are several mutually exclusive approaches to reality. They represent different aspects, one excluding the other, yet adding to our understanding of the phenomena as a whole. Such complementary situations appear even within physics; for example, in respect to the description of an atom in terms of the quantum state or in terms of the location of its constituents. The quantum state evanesces if it is observed by a sharp

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

instrument designed to locate the electron. The state is restituted when the atom is left alone and given enough time to return to its original form. Both aspects—quantum state and location—are complementary to each other; they are necessary concepts to provide a full insight into atomic reality.

Similar complementarities appear in all fields of human cognition, as Bohr often pointed out. There are different ways of perceiving a situation, ways that may seem unconnected or even contradictory, but they are necessary for understanding the situation in its totality. A simple example may suffice. A Beethoven sonata can be analyzed physically by studying the vibrations in the air; it can also be analyzed physiologically and psychologically by studying the processes at work in the brain of the listener. But there is another approach that gets closer to what we consider most relevant and essential in a Beethoven sonata: dealing with the immediate and direct impression of music.

The following anecdote may serve as an illustration of complementary approaches: Felix Bloch and Werner Heisenberg, on a walk along the shore, were discussing problems of physics. Bloch reported to Heisenberg some new ideas about certain mathematical structures of space, when Heisenberg, his mind drifting into complementary avenues of experience, exclaimed, "Space is blue, and birds are flying in it!"

Other complementary situations are indicated by the following pairs of human attitudes to different realms of experience: scientific-poetic, compassion-justice, neurophysiology-psychology, action-thought. The intention is not to emphasize the pair aspect of complementarity; on the contrary, the main thrust of this idea is the existence of many different approaches.

We assert that important parts of human experience cannot be reasonably evaluated within the scientific system. There cannot be an all-encompassing scientific definition of good and evil, of compassion, of rapture, of tragedy or humor, of hate, love, or faith, of dignity and humiliation, or of concepts like the quality of life or happiness. Certainly, it is possible and desirable to analyze the nervous and psychological processes and reactions that occur during the process of experiencing such ideas. Recent progress in neurophysiology and biochemistry promises much deeper scientific insights into that side of those human experiences. We may even acquire means

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of influencing, changing, and evoking such reactions. But there remain important aspects of these experiences that are not touched by the scientific approach. Usually they are the ones most relevant to us.

Other approaches to the questions and problems of human experience are found in art, poetry, literature, music and in forms of expression related to ethics, philosophy, psychology; and to faith, religion, and mythology. They imply forms of human creativity different from the creativity that makes science possible. The contrast between science and other approaches is not necessarily that between rational thinking and emotional feeling. One can and does talk rationally about emotional impressions, about music and other arts, about ethical problems, dignity, and the quality of life. One also can talk emotionally about scientific matters, about the wonders of nature, the vastness of space, and about the grand evolution from the primal bang to the present universe. Yet, within each approach, there is a specific type of discourse; it appears lucid and concise within its own intrinsic scale of values, but fragile and indefinite when judged by the peculiar requirements of a complementary approach. One view complements the other, and we must use all of them in order to get the full significance of our experiences.

Unfortunately, there is a certain resistance in the human mind to the recognition of complementary aspects. There is a strong trend toward clear-cut, universally valid answers that exclude different approaches. For example, the scientific approach is often considered to be the only serious and reasonable approach. No field of human experience seems to be in principle inaccessible to scientific study and comprehension, although the study of thought processes is still in its early infancy. Science may have a justified claim to completeness in this sense. But "complete" does not mean "all-embracing." Even if we reach a scientific comprehension of thinking and feeling, it will be necessary to use other methods of discourse to deal with our experiences. A system of thought such as science can be complete within its own framework of thought, but still leave out important aspects of experience. Indeed, in matters of human thinking, action, and feeling, those left-out aspects are often the most relevant ones. Some of the prejudices against science and technology are based upon a half-conscious resistance against the implicit claim of com-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pleteness. The scientific approach is not the only legitimate and reasonable one.

Whenever one way of thinking is developed with great force and success, other ways are unduly neglected. It was aptly expressed by Marcus Fierz, the Swiss physicist-philosopher: "The scientific insights of our age shed such glaring light on certain aspects of human experience that they leave the rest in even greater darkness."

Here is an interesting example from a time when the scientific approach was repressed and the religious approach was dominant. In the year 1054, during the height of religious belief in Europe, a supernova appeared, brighter than any planet. It lasted for three or four months, yet not a single chronicle in Europe mentioned this phenomenon. In the Middle Ages, the appearance of a star brighter than all others was not considered a relevant fact worth registering.

The one-sided religious emphasis of the Middle Ages and the equally one-sided scientific-technological emphasis of our time have released creative forces of enormous power. Think of the medieval creations of art, architecture, and moral philosophy, and of the development of science, natural philosophy, and technology in our era. At the same time, however, both one-sided approaches have led to serious abuses, such as the Crusades and the neglect of corporeal suffering in the Middle Ages, and the excessive concern with the values of material goods today.

As usual in the history of humankind, each emphasis has been distorted and used as means and reason for wholesale murder and destruction. Think of modern warfare and the nuclear arms race today—and of the reply of the papal legate Abbot Arnoud de Citeaux when he was asked what to do with the population of the town of Béziers after it was successfully conquered in the year 1205: "Kill them all. God will select those who should go to heaven and those who should go to hell!"

It must be pointed out that science itself has its roots and origins outside its own rational realm of thinking. In essence, there seems to exist a "Gödel theorem of science," which holds that science is possible only within a larger framework of nonscientific issues and concerns. The mathematician Gödel proved that a system of axioms can never be based on itself: in order to prove its consistency, statements from outside the system must be used. In a similar manner, the activity of science is necessarily embedded in a much wider realm

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of human experience. Science would be impossible without the conviction of every scientist, and of society as a whole, that scientific truth is relevant and essential. The scientific observation of the supernova of 1054 was not regarded as important in medieval Europe.

Human experience encompasses much more than any given system of thought can express within its own framework of concepts. We must be receptive to the varied, different, and apparently contradictory ways of the mind when we are faced with the reality of nature, of our imaginations, and of human relations. There are many modes of thinking and feeling: each of them contains a part of what we may consider the truth. Science and technology comprise some of the most powerful tools for deeper insight and for solving the problems we face. Some of these problems, indeed, were created by the thoughtless applications of those very tools, such as the pollution of our environment and—first and foremost—the growing imminent danger of nuclear war. But science and technology are only one of the avenues toward reality: others are equally needed to comprehend the full significance of our existence. Indeed, those other avenues are necessary for the prevention of thoughtless and inhuman abuses of the results of science. We will need all approaches to deal with the predicaments of humanity that prevent so many of our fellow beings from having a life worth living.

ENDNOTES

This essay is based in part on a paper by the author, with a similar title, that appeared in *American Scientist* 65, 405 (1977). It was presented in part as an Address at the Bicentennial of the American Academy of Arts and Sciences in May 1981.

[1]Some of the ideas expressed in the following sections have been influenced by published and unpublished thoughts of I. Prigogine and P. L. Morrison.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Subscription/Gift Order Form

Please send *DÆDALUS* for:

one year at $16 two years at $24, or two for one year at $24

(U.S. dollars only. Add $3 per year outside the United States.)

to me as a gift, preceded by a gift announcement in my name

MY NAME GIFT TO

ADDRESS ADDRESS

CITY/STATE/ZIP CITY/STATE/ZIP

(Additional one-year gift subscriptions are $12 per year; list on separate sheet.)

My check is enclosed Please bill me

DÆDALUS *Issues in Print*

"...whatever DÆDALUS is saying now, the editorials of the country will be saying three years from now."

—THEODORE H. WHITE

"There is certainly no question about the distinction of DÆDALUS and the crucial place it fills in the academic world."

—NORTHROP FRYE

Most *DÆDALUS* issues from previous years, including the special index volume *Twenty Years of DÆDALUS, 1958–1978*, are now available to *DÆDALUS* readers at $5 each ($4 each for combinations of 5 or more).

Please send me:

TITLE DATE QUANTITY

TITLE DATE QUANTITY

TITLE DATE QUANTITY

Please be sure to indicate your name and shipping address on the back of this card.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 31006 CANTON, MA

POSTAGE WILL BE PAID BY ADDRESSEE

DÆDALUS

Subscription Office
American Academy of Arts and Sciences
P.O. Box 515
Canton, MA 02021

I enclose $ _____ for the _____ copies of the *DÆDALUS Issues* indicated on the overlea
@ $5 each ($4 each for orders of 5 or more).

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Delivery terms: All orders must be accompanied by payment or institutional purchase order.
DÆDALUS pays book-rate postage on prepaid orders; billable orders will be invoiced for postage.
For orders outside the United States, add $1 per volume for surface mail delivery; for first class postal delivery or other special handling, please contact the *DÆDALUS* Subscription Office for correct rates.

☐ My check is enclosed ☐ Institutional purchase order enclose

Return this card to DÆDALUS Issues, P.O. Box 515, Canton, MA 02021

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Robert Scott Root-Bernstein

Creative Process as a Unifying Theme of Human Cultures

In our educational endeavors, we may be compelled to think of specialization in breadth rather than specialization in minutia.[1]

—Chandler McC. Brooks

WE LIVE IN A SOCIETY in which both the fruits and poisons of scientific endeavor increasingly impinge upon all other forms of culture. The ideas of science, such as those expressed in the theory of evolution by natural selection, challenge mankind to occupy a place in nature very different from what he occupies in other systems of belief. Simultaneously, technological innovations daily alter our psychological, social, and physical environments in ways that promote some forms of culture while sending others toward extinction. In brief, man's cultures compete, as do other species, for survival in a world that is as competitive as Tennyson's "nature, red in tooth and claw." The result is what Jonas Salk has called "the survival of the wisest,"[2] and science, for many people, is the "wisest" of the cultures. Certainly, if it is not the "wisest," it is the most powerful and effective of man's intellectual constructs. Thus, many individuals have agreed with I.I. Rabi's claim that "science is the center of culture."[3]

But not everyone sees science as the center of culture. There are many who see it rather as a plague upon culture. They view science

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

not as one of man's pursuits, but as an interloper threatening to displace all others. For them, science is different from the humanities, the arts, literature, politics, economics, and life itself. It is something nonhuman that impinges upon life from the outside, proclaiming its objective, analytical results without regard to human ideologies, beliefs, loves, or longings. Science is perceived as intellect without passion; reality without morality; method without meaning; truth without virtue; understanding without compassion; wisdom without mercy. It is a ruler that knows not how to rule.

Nor does it want to—for, far from denying these criticisms, scientists often turn them around and proclaim them to be not only virtues, but the source of the power and utility of science as well. The search for truth, most scientists will tell you, can only proceed in minds that are totally independent and objective. And truth needs no justification. "My life," says David Baltimore, "is dedicated to increasing knowledge. We need no more justification for scientific research than that."[4] Roger Guillemin agrees: "Science deals with the acquiring of new knowledge. The use, including misuse or ill use, of that knowledge is the realm of politicians, engineers, and technologists."[5] And, believes Alan Cormack, scientists should not be responsible for the knowledge they discover: "I've always been in my little ivory tower and I'd like to get back to it."[6]

Science, then, may be at the center of modern culture, but it seems to stand aloof. The result is what C.P. Snow, in 1959, called the "two-culture problem."[7] It is the same problem that Ruth Nanda Anshen defines as "the major dilemma of our epoch."[8] Is science, be it angel or devil, a culture apart, or is it an integral part of culture, as Rabi says? Is science truly objective, and the arts, literature, and all other creative endeavors mere subjective, emotional illusions? Is the search for any and all knowledge a pursuit that needs no justification, or is that search limited only to science? In short, is Snow's "two-culture problem" real, or is Anshen right in believing that there is, in reality, "a false antinomy between the scientist and the humanist"? *Must* these cultures be in conflict, or can they be melded into a cooperative whole? And *if* unity is possible, how can it be accomplished? These are difficult and important questions whose answers will fundamentally influence the future course of cultural evolution.

Much has been written, by scientists and by humanists and artists, about the two cultures ever since Matthew Arnold and Thomas

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Huxley began arguing the alternative merits of the sciences and humanities in education over a hundred years ago. Yet surprisingly little headway has been made toward defining the problem—let alone resolving it—partly because most of those who have addressed the issues have done so principally to defend the primacy of their own specialized pursuits. Thus, as Aldous Huxley pointed out, much as been written about "science *versus* humane letters, of science *and* humane letters,"[9] but the underlying assumption has always been, as the language itself demonstrates, that there are at least two distinct categories of culture. And so long as attention is focused on particular facets of cultural phenomena, this is undoubtedly true. But just as thunder and lightning have a common cause, so it seems to me that the varied manifestations of culture do too.

The problem with most discussions of culture is that they revolve around the products or manifestations of culture rather than the processes that bring those products into being; culture, that is, is discussed as if it were a static, unchanging *object* rather than a dynamic, evolving *process*. There are some good reasons for this emphasis. We can see, feel, touch, hear, or taste the products of culture, but we cannot similarly sense the processes by which they are made. We infer the cause by its effect, just as we infer the existence of gravity when we observe that all objects fall at a constant rate of acceleration. But inference takes the investigator out of the realm of objectively defined phenomena into the realm of subjectively refined hypothesis. To hypothesize subjectively is not easy for those raised on the simplistic myth that science is solely the study of verifiable, observable facts. What the layman does not know is that science—like art, poetry, literature, or history—has its subjective, emotion-laden, creative side as well. But laymen never see this side. Scientists, in the interest of promoting an objective, truth-oriented image, refuse to reveal it, as the response to James Watson's *Double Helix* demonstrates so well.

Thus, it is not science per se—the exciting and very personal[10] search for truth—that is at the center of our culture, but technology, the useful fruits of that search. Technology can be seen and touched. No other form of culture *works* so clearly. The dichotomy between the two cultures could therefore be drawn in terms of the utility of the objects produced by the culture, rather than in terms of discipline or pedagogical expertise, as Snow and others have done.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Those who produce or make possible the production of "objects of utility" (scientists and engineers) are in one culture, and those who produce "objects of no utility" (artists or musicians), or who merely dabble in ideas or facts for their own sake (historians, philosophers, and writers), are in another. The two-culture problem then becomes a problem of economic values versus human values; objectivity, productivity, and utility versus emotionalism, self-expression, and futility.

But anyone who knows his history of science and technology knows that science developed out of the arts and crafts of the Renaissance, and that most of the great discoveries of science—electricity, steam power, atomic energy, for example—began as intellectual exercises of no obvious utility at all. And anyone who pays attention to scientists as human beings knows that the greatest of them participated in many forms of culture. Some were accomplished artists—Sir Humphry Davy, Pasteur, Hermann von Helmholtz, Wilhelm Ostwald, Ernst Haeckel, Thomas Huxley, Ogden Rood, Theodor Boveri, Edgar Lord Adrian, and Jung. Some were poets—Galileo, Davy, J.H. van't Hoff, Maxwell, Hermann Minkowski, Fritz Haber, Richard Willstätter, Jacob Bronowski, Julian Huxley, E.N. da C. Andrade, and J.B.S. Haldane. Haldane, Leo Szilard, and C.P. Snow wrote fiction, and Claude Bernard intended to be a playwright. Kepler, Helmholtz, Ostwald, Max Planck, Einstein, Woldemar Voigt, and many others were musicians.

Van't Hoff himself suggested that this correlation between scientific and other forms of creativity was more than mere coincidence. After reading the biographies of more than two hundred scientists, he concluded that the greatest always demonstrated creative ability in nonscientific fields.[11] And physiologist A.V. Hill once remarked, "I've never known a good scientist who had broad interests . . . but I've never known a great one who did not." Thus, if the vast majority of new ideas in science spring from the minds of a few creative individuals, as Jerome Wiesner has noted,[12] and if these few individuals almost invariably demonstrate nonscientific creativity as well, may there not then be something cross-cultural and unifying in the creative process itself?

There appears to be. A close look for links between the nonscientific creativity of scientists and their scientific inventiveness reveals the connections, not in their creative products, but in the skills and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

patterns of thought they transfer from one field to another. Recently, historian Brook Hindle made this argument with admirable clarity in his pioneering study of the inventions of Samuel Morse and Robert Fulton.[13] Fulton was a protégé of the painter Benjamin West, and Morse, who studied both art and science in England, was considered one of the premiere American artists of his day. Hindle argues that their methods of invention and their design skills clearly reflect their artistic training. Nor are Morse and Fulton alone. That Claude Bernard became one of the finest anatomists in Europe within just a few years of beginning his science studies, at what was, for his time, the advanced age of twenty-two, perhaps owes something to the hand-eye coordination he had developed earlier by painting miniatures.[14] Similarly, it seems likely that Wilhelm Ostwald developed the mechanical skills that allowed him to invent dozens of new chemical apparatuses through the many hobbies and crafts in which his family participated. Ostwald recounted that as a boy, in addition to his musical and artistic training, he made his own cameras and photographic plates, firecrackers, paints, and so forth.[15] Gerald Holton has suggested that Einstein may have developed his unusually fine visual imagination through many years of playing with puzzles and building toys.[16] Jung wrote explicitly that his art was a way of thinking about the problems he addressed as a psychologist. Analysis of his paintings clearly shows a correlation between the subjects he painted and those he wrote about.[17]

Connections of another sort also seem to exist. Scientists are expressing increasing interest in "scientific aesthetics."[18] In part, this subject is a natural outgrowth of the part of philosophy in science that deals with criteria of theory choice. Beauty, simplicity, and elegance have always figured in the language of mathematicians and physicists.[19] What is meant by these terms? How are they applied? Where and how are they learned? So many important mathematicians and theoretical physicists have also been amateur poets and musicians that one cannot help but wonder whether the skills they developed in the arts—rhyming, meter, pattern formation, economy, precision, harmony, the ability to recognize in great complexity the application of simple rules (as in a Bach fugue)—may be ways of thought directly applicable to science as well. Certainly, for those who appreciate such things, van't Hoff's mathematical derivations of the laws describing the thermodynamic properties of extremely

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

dilute solutions have a simplicity, economy, and beauty that have their counterpart in his poetry.[20] The same could doubtless be said of many other mathematicians and physicists as well, and in this regard, the following anecdote may have some significance. Some years ago, a professor of mathematics at Princeton University returned from sabbatical to discover that one of his graduate students was no longer enrolled. He asked a colleague what had become of the student and was told, "Oh, him; he's a poet now. He didn't have enough imagination to be a mathematician." If we ignore the slur on poets, the other message is clear: at least as much—if not more—imagination is required to do science as any other creative endeavor.

Finally, scientists have actually found sources of inspiration in the arts in the form of unexplained phenomena, new data, and even useful techniques. As Cyril Stanley Smith has been arguing for years, art makes science possible through the medium of technology. His voluminous research into the subject speaks for itself.[21] Further evidence to support his thesis can be found in the French tradition of employing chemists in the Gobelin tapestry factories to produce better techniques of bleaching and dying fabrics. It is not by chance that Pierre Macquer produced the first chemical theory of dying, that Claude Berthollet was the first person to employ chlorine as a bleach, or that Michel Chevreul was the first scientist to develop a theory of color contrast and brightness.[22] The art of tapestry manufacture provided them with new scientific problems to solve. Their ability to recognize the application of the one field to the other was therefore essential to their success both as scientists and as contributors to the techniques of art.

Indeed, the same correlation of talents that allows great scientists to express their creativity both in science and in other endeavors seems to exist among the leading figures of every field. Is it too banal to mention Michelangelo, whose poetry rivaled his art, or Leonardo, the epitome of the "Renaissance Man"? If so, think of Strindberg, Balzac, and Tolstoy, who dabbled in chemistry and some of the other sciences.[23] Or, think of Charles Henry, who transformed the scientific studies of perception and color by Maxwell, Helmholtz, Chevreul, Rood, and others into a "psychophysical" theory of sensation, which he taught to Seurat, Pissaro, Fenéon, and Signac, and from which other neo-Impressionists, Expressionists, and Fauvists such as van Gogh and Derain drew so much inspiration.[24]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Think, too, of the many author-artists: Blake, Kipling, Max Beerbohm, Wyndham Lewis, D.H. Lawrence, Tennyson, Chesterton, Hardy, H.G. Wells, Maurice Baring, the Brontës, Elizabeth Barrett Browning, Dylan Thomas, Mark Twain, Shaw, J.R.R. Tolkein . . . the list goes on and on.[25] Even political figures—Napoleon and Marat—involved themselves in the science of their time.

Where, then, does one draw the lines between the sciences and the arts, the sciences and the humanities, the arts and the humanities, even between the arts and politics? How much do talents and skills developed in one field of endeavor make possible innovations in others? To what extent may creativity be the result of a correlation of talents, skills, and knowledge made possible by polymathy? To what extent does art make science possible, and science, art? How can the labeling of science or technology as more or less useful, more or less objective or "true," than the arts and humanities, be justified if in fact creativity in one goes hand in hand with the other?

Perhaps, as Victor Weisskopf, J.W. Meeker, and others have argued,[26] there are no absolute distinctions between the sciences, the humanities, and the arts; between utility and frivolity; between cultures. Perhaps, indeed, all are part of a whole, different manifestations of a single process or set of processes. Perhaps, because all of these aspects of culture are creations of human beings, culture is no more than a manifestation of the human mind. Perhaps, finally, it is the *process* of thinking, of creating, of innovating, that forms the unifying theme behind all culture. Utility and progress might be just secondary characteristics for which cultural evolutionary forces select. If this is true, the cultural split that must be examined is not between scientists and everyone else, but between those who innovate or create and those who do not. Therefore, it is the former, those rare individuals who supply the majority of new ideas, together with the process of innovation itself, that must become the focus of our study of culture. Innovation is the lifeblood of cultural change. Its effects upon culture are the same whether we speak of Einstein or Picasso. A discovery is a discovery, be it in science or in art:

> Discovery often means simply the uncovering of something which has always been there but was hidden from the eye by the blinkers of habit. This equally applies to the discoveries of the artist who makes us see familiar

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

objects and events in a strange, new, revealing light. . . . Newton's apple and Cezanne's apple are discoveries more closely related than they seem.[27]

So says Arthur Koestler in *The Act of Creation*. Robert R. Wilson responded to the question of whether his creativity as a physicist differs from that expressed by artists in this way:

No . . . I would guess that they're identical. When I am doing physics, as I said earlier, I don't think of it as science with a capital S. I am only conscious of myself as a man doing what I am doing in a manner nowise different from that when I do other things than physics. I don't like that connotation [that scientific creativity differs from artistic creativity]; I wish we weren't known as scientists. I think of myself only as a person working in a personal manner. I'm sure if I could make a good poem, I would experience the same feelings. I think there's something universal about the experience of something coming from your subconscious almost fully formed. . . . I think this is something that has basically to do with people, not physics.[28]

Physicist Murray Gell-Mann has this to say on the source of new ideas:

Everybody agrees on [where ideas come from]. We had a seminar here [at the Aspen Physics Center in Colorado], about ten years ago, including several painters, a poet, a couple of writers, and the physicists. Everybody agrees on how it works. All of these people, whether they're doing artistic work or scientific work, are trying to solve a problem.[29]

Thus, whatever the differences in the products of the various cultures, it is generally agreed that the way in which those products come into being is the same for all.

All creativity is an intellectual process; this is the key to understanding the unity of the creative process across cultures. It is therefore a trait that must be studied in those who display an active intellect, not in the objects or ideas that result from the process of intellect, nor as an entity that is culture-bound. Rather, creativity is a brain-bound entity, and it is the processes of the brain that must be studied if culture itself is to be understood. For culture and intellect have developed hand in hand throughout evolution, the former being impossible without the latter, and the latter being useless without the former.

There is a corollary to this line of reasoning. If creativity is common to the two cultures, then the study of creativity must also be

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

common to both. For, if Aldous Huxley is correct in stating that the fundamental difference between the sciences and the arts is that the former attempt to express objective, public truths about nature, while the latter attempt to express subjective, personal feelings about human life, then the study of innovation must be both science and art.[30] David Hawkins, in fact, has said precisely that.[31] To understand innovation, one must be able to express in objective, public language the truths about the subjective, emotion-laden, personal insights that give rise to new ideas in individual human minds. This is true whether the individual is a scientist, an artist, or a historian. When subjective, nonverbal insights are transformed into communicable ideas, the gap between the cultures is bridged.

When human beings and their activities become the objects of scientific study, a fusion of cultural techniques becomes necessary. The boundaries that may be drawn when individual activities are differentiated from one another become nonexistent when human activity itself becomes the subject of study. It is the difference between reducing the whole to its parts and integrating the parts to see the whole. Both operations are valid reflections of reality, but they lead to different sorts of conclusions about the order of things. It is, for example, perfectly valid for a biochemist to decompose a living cell into its constituent molecules and to report that it is made up of x percent of A, y percent of B, z percent of C, and so on. But even a complete list of cellular constituents does not yield a picture of life, for it is not the constituents themselves that make up the life, but their order and interactions.[32] Thus, as biochemist Erwin Chargaff points out, there is a certain irony to the fact that to study life, man must first destroy it.[33] It is equally clear that simply putting the constituents into a test tube, even in the proper quantities, would not yield a living cell, because the order inherent in the cell is not spontaneously generated, but is, rather, the result of the evolutionary process. All life comes from other life; life is the process of ordering, organizing, adapting, and changing. And these processes are maintained by specific mechanisms that are just beginning to be understood—mechanisms maintained from generation to generation, altered by random events that create infinitesimal increments of new order, and replicated according to a specific pattern based upon another pattern, almost identical but lately discarded. To create life, then, one must recreate the *process* by which life emerged, recreate,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that is, the ordering process that yielded organized matter that is capable of adaptation and change and which is unlike that found in randomly organized matter. One must, in short, understand not only the pieces of the puzzle and how they interconnect, but how they were formed as well. For the pieces are tools, means to an end, with a form and a function resulting from the process by which the tool was made. But, always, the process preceded the piece itself.

The same lesson is obviously true in the realm of culture. Once a canvas has been painted, a poem written, a song composed, or a discovery made, it may be decomposed into its parts, analyzed for its structure, and reassembled. But it cannot be *recreated.* As Paul Valéry commented in his *Introduction to the Method of Leonardo da Vinci,* "Collect all the facts that can be collected about the life of Racine and you will never learn from them the art of his verse."[34] Reassembling the *parts* of a life does not yield a life. Nor can any process of *analysis* recreate Racine's art. For it is clearly not the painting or the poem or the music or the discovery that makes a Picasso, a Racine, a Bach, or a Newton, but the *process* by which they created their products. Forgers are not artists; plagiarists are not writers; performers are not composers. Nor are those who reproduce famous experiments, knowing their outcome beforehand, discoverers. The end product is the same, but the content is different. The ordering or reordering of our perceptual universe that was essential to the creation of the original picture, the original poem, the original composition, the original discovery, is not necessary to create their copies, and accordingly, the information content of the copies is that much less.

How does one, though, get *at* this process of creativity and innovation? This is a far from simple question to answer, since in looking for evidence of these intellectual traits, it is generally only their traces that are found, the paintings, poems, music, or laws of nature that are the end products of the process. Rarely do we find direct evidence of the process itself. Thus, we are faced with the same sort of ignorance that separates the cultures from one another. This time, however, it is an ignorance that divides man from his cultures.

Sadly, this ignorance of process is knowingly and selfishly imposed by the creators and innovators who effect cultural change, who rarely have any interest in how they create; and if they have, it is only for their own gain. A journalist once asked Picasso how he

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

created his paintings. His reply, all too typical of the obscurantist attitude that divides the cultures from one another and man from his cultures, was, "I do not know; and if I did, I would not tell you."[35]

The same mystical attitude toward creativity is also typical of scientists. The crystallographer J.D. Bernal once wrote that, "unfortunately, it is not possible in any published book to speak freely and precisely about the way science is run. The law of libel, reasons of state and scientific fraternity itself forbid particular examples being held up alike for praise or blame."[36]

Part of that code also forbids scientists to shatter the ground of objectivity to reveal the bedrock of subjectivity that underlies their research. Thus, scientists often reply, when asked about their discoveries, "I'll be glad to tell you *what* I did; I do not think I'd like to discuss *why* I did it." When pressed further, these scientists often admitted that their hesitation stemmed from the fact that certain aspects of their research were guided by personal motives, contingencies of funding, mistakes, or other "nonscientific" factors. They were trained to be objective and to eschew subjectivity; as a result, they deny it when it appears in their own work.

One way to deny the subjectivity of their work is to adopt an objective language in reporting their results. Thus, a scientist's published works, his scientific papers—the "cultural objects" he produces—are not accurate records of the process by which he produced them. Indeed, Sir Peter Medawar recently wrote that "scientific 'papers' . . . not merely conceal but actively misrepresent the reasoning that goes into the work they describe." The simple reason for this is that scientific papers are not meant to be records of the method of discovery, but, rather, a posteriori structures imposed upon the discovery to eliminate in the product as much subjectivity as possible, and to provide the data with an apparently objective logic that will be convincing to other scientists. Thus, he concludes, since almost all history and philosophy of science is based upon studies of scientific papers, "what scientists *do* [as opposed to what they produce] has never been the subject of a scientific inquiry."[37]

It is not that the knowledge for such a study does not exist, since in fact it does. Rather, it is that the people who are the repositories of that knowledge generally do not feel it is important enough to take the time to recount or record their knowledge. Thus, as Stevan

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Dedijer, a theoretical physicist who believes in the possibility of a "science of science," has said,

> There is a need for summation of practical knowledge. What do we know? Fourteen generations of scientists have been trained. Everyone of those scientists [has] been trained. Everyone of those scientists had a teacher. That teacher had *know-how*. But very few have summed up that know-how.
>
> I'd like to cite the example of J.J. Thomson, who had nine Nobel prizewinners, thirty-two fellows of the Royal Society, and eighty-three professors of physics among his pupils. . . . Yet, when you look—what were his rules of thumb? how did he teach—you find practically nothing. I think if we examine present teachers—how do they teach?—we'll come up with information that will be useful to the decision makers.[38]

But can scientific creativity be taught? Can any useful generalizations be drawn from studies of successful scientists and their successful students? Dedijer obviously thinks that there can be. But contrast his hopes with the pessimism expressed in the following exchange between biologist Jacques Monod and Leon Eisenberg of the department of psychiatry at Harvard Medical School. The exchange occurred during the colloquium "The Creative Process in Science and Medicine."

> MONOD: I did not think we were going to discuss teaching creativity, as I do not believe this is possible. Anybody who has experience of American universities knows that one of the basic principles of American education is that you can teach any subject; any subject can be taught. There is not a single college in the United States that does not give a course called creative writing. How do they do that, Leon?
>
> EISENBERG: You will never find the answer.[39]

So now we have come full circle back to Picasso. Who does one believe: those who maintain that it is fruitless to look for the bases of creativity because they themselves do not understand it; or those who maintain that creativity is a skill that may be studied and analyzed and, when it is understood, taught like any other skill? Shall we believe that the world is flat because that is the majority opinion, and therefore never stray toward the perceived edge? Or shall we sail off in search of new worlds like Columbus, taking the risk that we may indeed disappear over the horizon forever?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This is neither an idle question nor a rhetorical one, but one that lies at the very heart of creativity itself. To be content with ignorance is to promulgate it. To say "I do not know" can be the beginnings of wisdom—but then to say, "Therefore, I *cannot* know," is not only bad logic, but a fatal form of reasoning. Neither Monod nor Eisenberg would ever dare to use that form of reasoning within science itself, yet they use it without hesitation outside their disciplines. And so we are back at the heart of the two-culture problem. We set different standards for our personal knowledge and for knowledge that is not part of it. The problem is that no one knows everything; thus, there is always someone to say that there is something he does not know and therefore it cannot be known. And since the vast majority of people know very little, the amount of ignorance and the amount that "cannot be known" is always larger than what can.

The importance of this feature of ignorance to culture should be obvious. Knowledge does not exist outside of its social setting; what is known must be passed on to those who do not know it, or the knowledge will disappear. The only possible solution to the two-culture problem, therefore, is education—or, as Aldous Huxley wrote: "The precondition of any fruitful relationship between literature and science is knowledge."[40] Monod himself realized this when he said:

> There are few clearer or more urgent duties facing the community of men of science than of combatting this modern schizophrenia. And how is it to be fought if not by the deepening of knowledge itself, by constantly extending the objective method into new domains, in fine, by education dispensed without hindrance and without sanction to free men?[41]

But is this education to consist only of interchanges between scholars about things already known, or, rather, is the combat to be between knowledge and ignorance? If it is to be the latter, then anything we do not yet understand or know how to do is fair game for intellectual combat. And being ignorant of the bases upon which new knowledge is itself created, I can think of no better place to begin the offensive. Culture, like man himself, can only benefit from understanding itself.

This is particularly true in a democracy. To paraphrase Monod, freedom to learn is a necessary prerequisite to the extension of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

knowledge. But although freedom to learn is necessary, it is not sufficient. There must also be freedom to choose what to learn, how to learn, and what needs yet to be learned. There is no innovation without freedom of thought. Diversity is as essential to cultural evolution as it is to biological evolution. To adopt uniformity, on the other hand, whether of opinion or genetic makeup, is to court extinction. Thus, one must have the freedoms that in our present world are accorded only to those who live under democratic governments.

But there is a facet of democracy that is often forgotten in our age of the mass media, advertising, and brainwashing. Democracy—whether it is political democracy or that formed worldwide by scientists, artists, historians, or any group that communicates freely and without regard for international boundaries or the limitations of national languages—is successful only when its members are sufficiently educated to make knowledgeable decisions about the issues facing them. Majority rule may be a sign of freedom, but when the majority is ignorant, freedom represents no more than the ability to opt for a system in which the blind lead the blind.

And that is exactly the situation today in all areas of education, from the sciences to the humanities and arts. Without knowing how ideas evolve, without understanding how or to what extent cultures depend upon the evolution of ideas, without any science of man, we have nonetheless institutionalized and formalized most cultural activities. Mass education is the order of the day, but it is only mass in the sense that an enormous amount of information is passed on to a large mass of people. What is taught is fragmentary and fragmented, yet it is almost impossible for any student to realize the extent of this fragmentation from any textbook or lecture, for these represent the final, packaged products of knowledge, not their lacunae. Worse, mass education means uniformity of education—standardized curricula, standardized textbooks, standardized tests, standardized training, standardized minds. The mob rules. Only what the masses can learn easily is taught, and mediocrity reigns supreme. The acquisition of old knowledge becomes an end in itself, while the search for new knowledge is shunted aside. We undertake only what we can plan; we plan only what we can foresee; and we foresee only what is obvious from the knowledge we already have. Education becomes not only conservative and tradition-bound—traits that are, in themselves, necessary and laudatory—but tauto-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

logical as well, closed to change and innovation, and unable to see beyond its own horizons.

Francis Bacon was aware of this problem four centuries ago. In his *Advancement of Learning* he said, "They are ill discoverers that think there is no land, when they see nothing but sea."[42] Yet we have produced far too many "ill discoverers"—and even applauded their efforts—not to realize that there is a problem to be resolved. The mathematician-philosopher R.D. Carmichael recorded an instance where such shortsightedness was not only accepted but actually promulgated by "one of our leading universities." He cites the following paragraph from the Register of the University of Chicago, "where it appeared regularly for a decade and a half overlapping the end of the last century and the beginning of this":

> While it is never safe to affirm that the future of Physical Science has no marvels in store even more marvelous than those of the past, it seems probable that most of the grand underlying principles have beem firmly established and that further advances are to be sought chiefly in the rigorous application of these principles to all the phenomena which come under our notice. It is here that the science of measurement shows its importance—where quantitative results are more to be desired than qualitative work. An eminent physicist has remarked that the future truths of Physical Science are to be looked for in the sixth place of decimals.[43]

The period in which this article appeared, of course, saw the discovery of both the electron and radioactivity, the invention of quantum theory, and the formulation of the theory of relativity.

The problem, however, is still very much with us. People everywhere continue to huddle in the darkness, clinging to the hope that ignorance is indeed bliss. Philip Sporn, one of the world's leading engineers, recounted the following story:

> Some years ago I was on a committee to find a new department head in the college of engineering of one of our great universities. [Sporn was on the advisory councils of Columbia, Cornell, MIT, and Princeton.] The most striking thing to me in all of this rather interesting chore was when we sat down with the staff of the department. Their attitude was, and these were their words: "We don't see why we shouldn't close ranks." They used that phrase. They wanted to close ranks. An outsider—in a great institution of learning, mind you—was the enemy. He might bring in some ideas that would upset them.[44]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Scientists and engineers are not the only ones to spurn creativity and innovation. The Nobel Conference held a meeting to discuss "creativity" in 1970, and William Arrowsmith, a professor of classics and humanities, who has taught at Princeton, Wesleyan, the University of California (Riverside), and elsewhere, started by saying, "I begin where I must, with the humanities, not only because I know them best, but because creativity is so dreadfully and revealingly absent from them. I do not regard this as a seriously debatable point, so I will be extremely cursory. It is not polemical analysis that is needed, but constructive proposals."[45]

But if these are the men who educate the masses, and this is how they view creativity and innovation themselves—as something alien to their own work and to the job of education—how is the knowledge that is necessary to the amelioration of ignorance, to the resolution of the two-culture problem—to the advancement of culture itself—to be carried forward?

The difficulty is that so much effort is put into teaching what is known that it never occurs to educators to teach how to recognize the *unknown;*[46] yet a person must be aware of his—or her—ignorance in order to pose the problems necessary to cure that ignorance. And instead of teaching *how* to raise and resolve problems, the masses are taught only *what* problems have already been raised and what the resolution was. What is imparted, therefore, is knowledge without understanding, products without modes of production, solutions without problems, ideas, but not how to think. In *To Understand Is to Invent,* Jean Piaget summed it up by saying that standardized curricula and programmed instruction—the staples of mass education—are "conducive to learning, but by no means to inventing."[47]

The importance of distinguishing between learning and inventing is clear if we return to a consideration of the importance of creativity and innovation to both unifying culture and to its continued evolution. But because creative people like J.J. Thomson or Picasso or Monod are either not interested in the bases of their own creativity or do not understand it, and do not wish to do so, only the products of culture, not the processes of their production, are passed from one generation of mankind to the next. Knowing and doing are different, as different as vicarious experience is from direct. Yet we live in an age which believes that if you read enough, or attend

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

enough concerts or view enough exhibitions, you can become cultured; more, you can become an "expert." Nowhere is the fallacy of this "armchair" view of knowledge acquisition more forcefully revealed than in the following experience related by Leon Eisenberg. "I am told," he explained to a symposium on creativity,

> that in so distinguished an institution as MIT, a student can have mastered calculus to the satisfaction of the teacher by having solved the problem set on the final examination. On entering the physics course he cannot see how to apply the calculus to the solution of problems in physics. There is something very much wrong about what has been learned when the skills are not transferable.[48]

What is wrong, of course, is that such students have learned to *copy* paths of reasoning worked out by others, but not to recreate, or create for themselves, a line of reasoning on their own. Their acquired skills are the skills of the forger or plagiarist, not those of the artist, writer, or inventor. They have not been taught to think for themselves, but to think as others have thought before them. To be successful students, they have learned to allow others to tell them how to think, what to think, and when to think it. They have learned not to ask questions, but only to give answers. They do not invent, but only repeat. This, in spite of Jerome Wiesner's cogent advice. In education, he said,

> there must be encouragement and stimulation of imaginative and unconventional interpretations of experience in general; this is particularly true of problem-solving activities. It is important, especially in childhood and early youth, that novel ideas and unconventional patterns of action should be more widely tolerated, not criticized too soon and too often. . . . We must explicitly encourage the development of habits and skills in looking for, and using, analogies, similes, and metaphors to juxtapose, readily, facts and ideas that might not at first appear to be interrelated. Early in this development we should foster a clear understanding of the special character and usefulness of the private, informal process of conducting a search for new ideas and insights; and of the distinction between it and the equally necessary but more elaborate and rigorous machinery needed for verification of results, and their systematic development for incorporation into the accepted body of knowledge.[49]

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The result of ignoring the advice of men like Piaget and Wiesner, at least in general, is the sort of student that is, as Jacob Bronowski wrote, always a disappointment to his teachers:

> Every teacher of science knows that some of his students never learn the living language, but only the techniques, so that they never rediscover and remake the theorems for themselves—they only learn them by heart. In time, these plodding students will become the journeymen of science. Competent in routine, but quite unimaginative.[50]

What Bronowski did not say is that these unimaginative types are the vast majority of students; that journeymen make up 99 percent of scientists; that the students who learn the living language do so, very often, in spite of their teachers.

The same situation, of course, prevails in other disciplines as well—indeed, in all forms of human endeavor. In literature, we learn the catechism of great authors; we learn to quote famous lines; we learn to recognize genres and their historical development so that we can identify passages by period and probable author. It used to be common, though it is now less so, to learn to write by copying the style and content of famous authors. Students learn to recognize and identify analogies, metaphors, similes, and patterns, but not to think analogically, to create metaphors, or to invent new patterns. These skills are not considered part of any discipline, let alone literature. Yet, these are the skills that Wiesner believes most important to scientific creativity. And, if Bronowski and Piaget were right, one only learns by recreating or creating for oneself.[51] To appreciate or understand a poem, one must recreate the poem, rediscover the meanings and possibilities of the words. Yet this cannot be done if the student has never attempted to write a poem himself, for he will not understand either the possibilities or the limitations of the medium. Thus the importance of teaching creative writing, even if the teaching does not produce new masters. One cannot appreciate what an author has done until one has experienced the difficulties and joys of *trying*. No one can be a master of everything; but to understand and appreciate anything, one must be familiar with the process used in creating. The same is true of the sciences and the humanities. Yet education familiarizes us not with the processes, but with facts and objects. Science becomes a set of laws, problems, and demonstrations with predetermined outcomes. Art history is taught as a series

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of paintings and sculpture rather than new ways of perceiving nature, expressing perceptions, or creating impressions. Music appreciation is taught by listening rather than learning an instrument or trying to compose. History is a dreary list of dates, names, and facts, ordered by chronology, but not by reason or theory. Is it any wonder that the classicist Arrowsmith condemned his own beloved humanities for being devoid of creativity, or that he has been joined in his appraisal by other respected figures such as Sir Karl Popper and Walter Kaufmann?[52] How, if we teach only the skills of the forger, the plagiarist, and the imitator, can we expect students to turn into anything other than pedants, scholastics, and journeymen?

Let there be no mistake. All cultures need pedants, scholastics, and journeymen, for these are the individuals who conserve culture. But, if cultures compete, as do species, for niches in an ever-changing world, then cultures, like species, need a source of variations and innovations. In nature, these occur spontaneously through mutations and hybridization. In cultures, similarly, some individuals appear to have innate capacities that are qualitatively different from those of their fellow beings. Culture, however, differs from biology in one major respect: "survival of the wisest," unlike "survival of the fittest," is an *artificial* form of selection. Cultures may encourage the natural inquisitiveness of exceptional individuals, and they may foster or even create new forms of cross-disciplinary hybridization, just as scientists may artificially produce new forms of life. Unlike the purely biological organism, mankind has the ability to analyze his situation, to determine which characteristics have the greatest survival value or represent the wisest path to follow, and, in response, to change himself and his environment.[53] The reverse is also true: cultures may discourage natural inquisitiveness and prevent cross-cultural hybridization, may ignore the lessons of history and assume, without basis, that their present system is the best when in fact it is leading them to cultural extinction. As biologist Hans Gaffron pointed out, the greatest impediment to progress, both within science and outside it, is "resistance to knowledge,"[54] the adoption of the sort of intellectual blinders that have created the "many-cultures problem" and which has so troubled Carmichael, Sporn, Arrowsmith, Bronowski, and Snow. What is distressing is not that there are so many pedants, scholastics, and journeymen in every culture, but that their prevalence and virtual ignorance of the cross-cultural bases

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of creativity are sometimes an insurmountable impediment to that tiny number of innovators and intellectual hybrids who spawn the vast majority of new ideas.

What needs to be done? First, the phenomenon of "correlative talents" must be given its due: we need to recognize that creative scientists are, more often than not, creative artists, poets, writers, musicians, and philosophers as well, and that the latter are, more often than not, creative in other disciplines. The phenomenon indicates that the creative process is the same in every discipline and that, when the universality of process is emphasized rather than the specificity of products, the skills learned in one discipline are transferable to others. Creative skills, furthermore, can be taught by attempting to *create* and *recreate* instead of learning to copy, plagiarize, and imitate. Even if only a small minority of individuals become innovators and intellectual hybrids as a result of such training in the use of creative skills, exposure to their use will at least induce in journeymen-types an appreciation of the processes and connections that unify cultures at the creative level. Such appreciation should not only help to bridge the many-cultures gap, but create an awareness of how to foster rather than hinder successful innovators.

How are these objectives to be realized? There is no single, simple solution to this problem, no formula for churning out creative individuals or for creating successful intellectual hybrids. There is one general change, however, that clearly needs to be made in our educational institutions from kindergartens to postgraduate institutions. There is a manifest need to add to curricula what C.H. Waddington called a program of "general studies," not a "great books" curriculum or any other similarly broad-based smattering of knowledge, but a program that teaches what Waddington termed "tools of thought"[55]—skills such as analogizing, pattern-forming, extrapolating, criteria of choice (aesthetics), problem invention, and so forth—tools that are necessary to operate successfully in any discipline whatever. Equally important must be practice in *creating* and *recreating* ideas, learning to criticize and select good ideas from bad, and practice in the transference of skills between one discipline and another.

If this program of "general studies" sounds unrealistic at first, recall that it is based not upon some utopian dream, but upon careful analysis of how successful innovators in many fields were trained in

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the past (though, almost invariably, outside of the classroom). Others have also proposed similar programs. For all his skepticism concerning creativity, Jacques Monod nonetheless called for a new science of the "noosphere," the world of the mind that man has created in his attempts to adapt to the biosphere. "To contribute not only to knowledge, but also to maintaining its unity—this, too, is a permanent duty of the scientific community," Monod admonished his colleagues.[56] Paul Weiss, another biologist, proclaimed similarly that "the time has come when man must face the decision of either implementing the desideratum of unity or else reverting to jungle warfare of mutual extinction among conflicting doctrines, each claiming a monopoly for its particular brand of dismembered culture."[57] Process, he continued, and the search for unity in cultures must become the focus of a new educational program designed to prevent this jungle warfare. Similarly, the Charles F. Kettering Foundation, in cooperation with Teachers College of Columbia University, held a symposium recently entitled "Knowledge, Education, and Human Values: Toward the Recovery of Wholeness," at which many speakers expressed the need to integrate once again mankind's ever-diversifying experience through educational reform.[58] Whether such reform follows the outlines presented here or takes some other form should not obscure the fact that the many-cultures problem is one of escalating importance, one that will not be resolved until greater attention is paid to those who bridge cultures and the processes by which they do so.

ENDNOTES

[1]*The Future of Biology* (New York: NYU Press, 1966), p. 13.
[2]J. Salk, *The Survival of the Wisest* (New York: Harper & Row, 1973).
[3]I.I. Rabi, *Science: The Center of Culture* (New York: World Publishing Co., 1970).
[4]D. Baltimore, *Time* (August 6, 1979), p. 35.
[5]R. Guillemin, *Time* (September 3, 1979), p. 5.
[6]A. Cormack, *Time* (October 22, 1979), p. 80.
[7]C.P. Snow, *The Two Cultures: And a Second Look* (Cambridge: Cambridge University Press, 1959, 1963).
[8]R.N. Anshen, Preface to Rabi, *Science: The Center of Culture.*
[9]A. Huxley, *Literature and Science* (New York: Harper & Row, 1963).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[10]*The Joys of Research,* edited by W. Shropshire, Jr. (Washington, D.C.: Smithsonian Institution Press, 1981), and J. Goodfield, *An Imagined World: A Story of Scientific Discovery* (New York: Harper & Row, 1981).

[11]J.H. van't Hoff, "Imagination in Science," translated by G.F. Springer, *Mol. Biol. Biochem. Biophys.* 1 (1967): 1-18. Originally delivered in 1878.

[12]J.B. Wiesner, "Education for Creativity in the Sciences," *Daedalus* 94 (3) (Summer 1965): 527-37.

[13]B. Hindle, *Emulation and Invention* (New York: NYU Press, 1981).

[14]J.M.D. Olmsted and E.H. Olmsted, *Claude Bernard and the Experimental Method in Medicine* (New York: H. Schumann, 1952).

[15]W. Ostwald, *Lebenslinien, eine Selbstbiographie* (Berlin: Klasing, 1926-27), 3 vols.

[16]G. Holton, *Thematic Origins of Scientific Thought* (Cambridge: Harvard University Press, 1973).

[17]C.G. Jung, *Word and Image,* edited by A. Jaffé for the Bollingen Series (XCVII:2) (Princeton: Princeton University Press, 1979).

[18]*On Aesthetics in Science,* edited by J. Wechsler (Cambridge: MIT Press, 1978), and *The Aesthetic Dimension of Science,* edited by D.W. Curtin (New York: Philosophical Library, 1982).

[19]S. Chandrasekhar, "Beauty and the Quest for Beauty in Science," *Physics Today,* 32 (1979): 25-30, and J.D. Tsilikis, "Simplicity and Elegance in Theoretical Physics," *American Scientist* 47 (1959): 87-96.

[20]E. Cohen, *Jacobus Henricus van't Hoff. Sein Leben und Wirken* (Leipzig: Akademische Verlags-gesellschaft, 1912).

[21]C.S. Smith, *From Art to Science* (Cambridge: MIT Press, 1980), and Smith, *A Search for Structure* (Cambridge: MIT Press, 1981).

[22]W.I. Homer, *Seurat and the Science of Painting* (Cambridge: MIT Press, 1964).

[23]One could add Goethe, Borodin, Chekhov, and Nabokov as well.

[24]J. Rewald, *Post-Impressionism from Van Gogh to Gauguin,* 3d ed. (Boston: New York Graphic Society, 1978).

[25]L.L. Szladits, and H. Simonds, *Pen and Brush: The Author as Artist:* (New York: The New York Public Library, 1969).

[26]V.F. Weisskopf, "L'Art et la Science," *CERN,* March 1980, pp. 31-52, and J.W. Meeker, "The Imminent Alliance: New Connections Among Art, Science, and Technology," *Technology and Culture* 19 (1978): 178-98.

[27]A. Koestler, *The Act of Creation* (London: Huthinson, 1976).

[28]R. Wilson, in Editors of International Science and Technology, *The Way of the Scientist* (New York; Simon and Schuster, 1966), pp. 46-56.

[29]M. Gell-Mann, in *The Search for Solutions,* edited by H.F. Judson (New York: Holt, Rinehart, and Winston, 1980), pp. 20-21.

[30]Huxley, *Literature and Science.*

[31]D. Hawkins, "The Informed Vision: An Essay on Science Education," *Daedalus* 112 (3) (Summer 1965): 538-52.

[32]C. Bernard, *An Introduction to the Study of Experimental Medicine* (New York: Dover, 1957); J.S. Haldane, *The Philosophical Basis of Biology* (Garden City, N.Y.: Doubleday, Doran, 1931); and A. Szent-Gyorgyi, *Introduction to a Submolecular Biology* (New York: Academic Press, 1960).

[33]E. Chargaff, *Heraclitean Fire. Sketches from a Life before Nature* (New York: Rockefeller University Press, 1978).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[34]P. Valéry, *Introduction to the Method of Leonardo da Vinci,* translated by T. McGreevy (London: J. Rodker, 1929).
[35]H. Krebs, and J.H. Shelley, *The Creative Process in Science and Medicine* (Amsterdam: Excerpta Medica; New York: American Elsevier, 1975).
[36]J.D. Bernal, *The Social Function of Science* (Cambridge: MIT Press, 1939, 1967).
[37]P. Medawar, in *The Search for Solutions,* p. 3.
[38]S. Dedijer, quoted in *The Way of the Scientist,* pp. 274-75.
[39]Krebs and Shelley, *The Creative Process.*
[40]Huxley, *Literature and Science.*
[41]J. Monod, *From Biology to Ethics* (San Diego: The Salk Institute, 1969).
[42]F. Bacon, *The Advancement of Learning,* edited by G.W. Kitchin (London: Rowman and Littlefield, 1973).
[43]R.D. Carmichael, *The Logic of Discovery* (Chicago: Open Court, 1930).
[44]P. Sporn, in *The Way of the Scientist,* pp. 139-46.
[45]W. Arrowsmith, *Creativity: A Discussion at the Nobel Conference,* edited by J.R. Roslansky (Amsterdam: North-Holland, 1970).
[46]R.S. Root-Bernstein, "The Problem of Problems," *Journal of Theoretical Biology* 99 (1982): 193-201.
[47]J. Piaget, *To Understand Is to Invent: The Future of Education* (Harmondsworth, England; Penguin Books, 1973).
[48]Krebs and Shelley, *The Creative Process.*
[49]Weisner, *Education for Creativity in the Sciences.*
[50]J. Bronowski, *The Origins of Knowledge and Imagination* (New Haven: Yale University Press, 1978).
[51]Piaget, *To Understand Is to Invent,* and J. Bronowski, *The Visionary Eye: Essays in the Arts, Literature, and Science* (Cambridge: MIT Press, 1978).
[52]K. Popper, *The Poverty of Historicism* (New York: Harper & Row, 1977), and W. Kaufmann, *Faith of a Heretic* (Princeton: Princeton University Press 1978).
[53]H.G. Wells, *A Modern Utopia* (Lincoln: University of Nebraska Press, 1967; published originally in London in 1905).
[54]H. Gaffron, *Resistance to Knowledge* (San Diego: The Salk Institute, 1970).
[55]*Biology and the History of the Future,* edited by C.H. Waddington (Edinburgh: University Press, 1972); Waddington, *A Man-Made Future* (London: Croom-Helm, 1978); and Waddington, *Tools for Thought* (London: Cape, 1977).
[56]Monod, *From Biology to Ethics.*
[57]P. Weiss, "Unity of Culture: A Program for a Program," in *Within the Gates of Science and Beyond: Science and Its Cultural Commitments* (New York: Hafner, 1971).
[58]D. Sloan, et al. "Knowledge, Education, and Human Values: Toward the Recovery of Wholeness," *Teachers College Record* 82 (1981).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Stanley Hoffmann

Cries and Whimpers: Thoughts on West European-American Relations in the 1980s

CAN ANYTHING NEW OR WORTHWHILE be said about the relations between Western Europe and the United States? There have been so many diagnoses and prescriptions, so many warnings of crisis and sightings of turning points. And yet, something new is happening. To call it mutual estrangement would be too strong. But each side sees the other from a greater distance than before; each side seems to be moving away from the other. The reasons for this are partly revealed by the recriminations one hears in Western Europe, and we shall examine these complaints. But first, we must say a word about the West European situation; it is the background of the laments that are so frequently heard on the eastern side of the Atlantic Alliance, and also one of the causes of American grievances. Americans who take the time to think about their country's current relations with Western Europe know just enough about the latter's situation to be worried, annoyed, exasperated, or bored. West Europeans, on the whole, know much less about the situation in the United States, and do not appear to make much of an effort at understanding it. They select only those features that can be useful to them in their arguments against their domestic enemies (a classic French habit) or only those aspects that confirm their dislikes and strengthen their misgivings about America. After a look, then, at the West European situation and a discussion of the recriminations, I shall try to suggest what alternatives we face.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

II

Western Europe has not yet resolved the identity crisis I wrote about twenty years ago.[1] Today it faces two distinct but related crises: the crisis of its attempt at unity, and the crisis of its industrial societies.

What used to be called "the building of Europe" is a field of paradoxes. Rarely have the foreign policies of the main West European states been so convergent: all of them have given firm support to the NATO decision of December 1979 to deploy American "Euromissiles" in several European countries; all would like to preserve economic talks and a political dialogue with the Soviet Union. Rarely have the economic policies of the members of the European Economic Community been so similar: all are trying to reduce inflation, to check the rise of wages and prices, to contain the costs of social security systems, to resist protectionist pressures, and to limit the size of budget deficits; all want to create conditions that will allow industry to modernize and stay or become competitive, even at the cost of very high unemployment. When one government tried—alone—to pursue a different policy of domestic expansion, the results quickly turned out to be so bad for the national currency, the balance of payments, and the country's competitiveness that it had to shift gears: Mitterrand had to move from Socialist reflation to Socialist austerity, from giving priority to employment and fairer distribution to giving it to the modernization of production and fiscal restraint. And yet, despite these similarities, the heavy vehicle of the EEC has gained neither power nor speed. Reality remains national, and (some would add: therefore) bleak.

To be sure, there have been some successful EEC attempts at coordinating social policies, some initiatives aimed either at reducing the burdens imposed by the decline of the steel industry or at launching joint research programs in advanced technologies. The Common Agricultural Policy has begun to reform by tackling the delicate problem of overproduction of milk. On the whole, however, two things stand out. One is that each nation wages its own battle against economic and social headaches—particularly unemployment—and looks at the EEC, at best, as a supplementary source of funds or as an occasionally welcome pretext for doing unpopular things (such as closing steel mills) by arguing that they were ordered by the bureaucrats in Brussels. More than ever, each country has its

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

own way of coping with the common agenda, its own political necessities, rhetoric, and traditions, its own peculiar diversions that the neighbors find hard to understand (the school issue in France, the linguistic problem in Belgium, and so on), its own network of institutions and practices for industrial relations, its own constitutional setup and party system. There may be, in some respects, a Europe of businessmen: young people travel from one country to another as if borders did not exist, ministers from different nations but with comparable responsibilities meet or communicate incessantly. But the national systems simply refuse to merge.

Many reasons have been suggested: bureaucratic inertia; the fierceness with which governments defend what is left of their state's "sovereignty" when economic interdependence in fact deprives them of genuine autonomy; the difference between electoral schedules and agendas; above all, the reluctance to give up national habits of decision-making and problem-solving (even when they only yield mistaken decisions and fail to resolve problems) in exchange for new institutional systems that nobody would know how to manipulate and that would become stakes in the battle for control. To this one could add the persistence of national suspicion or prejudices and the fact that in periods of rough weather—as in the past ten years—the citizens continue to turn, for benefits or blame, to their own governments.

The other obvious fact is the paralysis of the EEC machinery. Its financial resources, always limited because of the states' suspiciousness and needs, are now clearly insufficient, even for the tasks the members would like the Community to perform; but the states have not been able to agree on raising them. The EEC provides the spectacle of an organization that, more than ten years after the entry of a major member (England), still argues relentlessly about that member's financial contribution and, in effect, about the terms of its entry; of a political system in which the Parliament is both elected by universal suffrage and almost impotent (with the double result of frustration and occasional irresponsibility in the Assembly and of turning the election into a mere referendum on the domestic policies of each member state); of a set of institutions that spend far more of their members' energy on shuffling dossiers and deadlocks from one level to the other than on reaching decisions. The disproportion between the stakes—Western Europe's future—the means at the EEC's

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

disposal, and the outcomes is overwhelming. And the fiasco of the machinery of the Treaty of Rome, only partly compensated by the survival of the common monetary system (which functions among some, not all, of the EEC's members), has now resulted in the decline of foreign policy coordination as well (the so-called political cooperation, which is juridically outside the provisions of the Treaty of Rome, appears comatose). Mitterrand's attempt at transcending inertia and bickering through a new treaty and a new agency for "political union" risks being more divisive than electrifying—what the French call a *fuite en avant* rather than a renewal.

The effects of these developments are clear. Much time is spent simply trying to pressure the formidable Mrs. Thatcher into conviviality. Since the handling of issues remains primarily national, the French misread the West German scene (during the long debate on Euromissiles) as if thirty years of cooperation had bred more ignorance than familiarity. The Italians, who in their speeches mention Europe more often than anyone else, continue not to pull their weight in the Community. Educational systems remain national, and the small European University Institute, stranded above Florence in its lovely renovated monastery, is still awaiting the day when higher education will be rescued from national bureaucrats, pressure groups, and routines. Above all, all economic experts lament that the continuing fragmentation of Western Europe breeds economic and social disasters: the "common" market is still riddled with barriers; the effort at scientific and applied research, while not lacking funds if one simply adds up the national programs, is partly vitiated by national "dispersion and barriers";[2] national governments, whose orders and purchases are vital for industrial development, continue to protect the "market" of public orders from one another, and private (national) enterprises often prefer to cooperate with extra-European ones than with other European companies. As Shirley Williams noted recently,[3] there are not enough European multinationals to compete with American and Japanese ones, and the EEC risks being "overwhelmed by the scale of operations required by some of the new technologies."

This brings us to the other crisis. One of the triumphs of the postwar recovery—this huge collaborative effort of Western Europe and the United States—had been the establishment of modern industrial societies in Western Europe, all of which, whatever their degree of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

egalitarianism, put their faith and energies into growth. They dreamed, more or less fantastically, of "pragmatic" politics, routinized industrial relations, and mass education. At worst, they seemed to move toward what Raymond Aron had called "querulous satisfaction," instead of ideological cleavages and class warfare. During the "thirty glorious years" (Jean Fourastié's term), the West German industrial machine was rebuilt and appeared more powerful than ever, while France and Italy finally underwent their industrial revolutions. Some of course remained skeptical about either the permanence of bliss or the triumph of economic rationality over all other forms of behavior. The eruption of 1968 (which remains even more baffling after the hundreds of volumes that tried to make it intelligible) showed that there were—now, or again—powerful, if confused and confusing, complaints about "modernity," "consumerism," "programmed living," and so on. But the real crisis turned out to be the post-1973 economic one, a combination of an almost classic recession (albeit in social and political systems very different from those of the 1930s) and of a technological revolution that challenged Western Europe's capacity to compete, just as its nations were being hit by the effects, first of the oil shocks, then of America's recession.

In a sense, this convergence of challenges has accelerated what the optimists of the sixties had predicted. The old working classes are disappearing (one reason the French Communist party, so much more *ouvriériste* than its Italian counterpart, is in trouble). They are being splintered: torn up by the evolution of the labor market; by the divergence in interests between the old, declining industries and the new ones; by the contrast between immigrant workers (who took the place of the old proletariat) and well-protected, almost unmovable workers; by the conflicting strategies of divided labor unions, some of which are trying to save every job, while others accept the logic of "industrial redeployment," and so on. To be sure, the welfare institutions of the West European states (so often sneered at by American conservatives and neo-conservatives) contributed to this dissolution by cushioning social distress and inventing a variety of ways of coping with unemployment, from retraining to all the tricks aimed at reducing the supply of labor—without either reducing private incomes or burdening enterprises or costing the state too much! It is difficult today for workers or unions to trigger prole-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tarian solidarity. When the steelworkers of Lorraine, incensed by planned closures of factories, came to Paris to demonstrate, they marched alone. And none of the national political systems has collapsed this time under the weight and anger of the unemployed, even when the rates of unemployment reached 10 or 12 percent. This stability of the political institutions is a real achievement, one that refutes many of the arguments about "ungovernability."

And yet, the balance sheet is not positive. Socially, if class solidarity is down, piecemeal, querulous dissatisfaction is up: this succession or juxtaposition of group egoisms, professional demands, and fragmented greed, which either batters the state or tries to bargain with it—but in either case, squeezes it—is what political scientists rather ceremoniously call neo-corporatism. The workers of France's more advanced plants may not join the steelworkers or the automobile workers laid off all around Paris, but when the truckers closed down major roads, much of the public, thinking about its own sectoral interests, sympathized. Unions are often just strong enough to behave as nuisances in the eyes of employers or of users bothered by strikes, but they are neither united nor self-confident enough to be effective partners in social *concertation*. Moreover, economic hardships have created a new kind of grand (rather than "corporatist") cleavage between the immigrants and the natives—an issue eloquently described by Jane Kramer.[4] This adds to the tone of pettiness, of unideological anger and meanness (for it would be unfair to the old chiliastic ideologies to place them at the same level as present-day anti-immigrant racism).

Economically, many West Europeans are worried and dismayed by some obvious facts: unemployment there lasts longer than in America. This is partly because of greater labor mobility in the United States, which itself results, in part, from the existence of less extensive welfare systems and of unions that, unlike many of those in Europe, pay more attention to the creation of new jobs than to the defense of old ones. Another cause is insufficient capital for job creation in new technologies—in part, the result of heavier tax and social burdens on enterprises and of the state's need to spend so much on welfare.[5] Marina von N. Whitman mentions long-term demographic and social factors that could make structural unemployment pressures in Western Europe worse.[6] Another worrisome fact is Western Europe's lag in the new technological revolu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tion: for every West European robot, there are two in the United States, three in Japan.[7] In the most advanced and promising sectors, few European companies are among the leaders—partly because their dimensions are too small. We are back at the vicious circle; the West European nation cannot compete because it does not have the proper resources and market, but the EEC, which has the right scale, has few resources and practically no policy. No wonder Mitterrand calls for a "European space for industry and research";[8] but the very vagueness of the formulation shows that the solution, thus presented, is part of the problem.

The extent to which this lag results from deficiencies in West European educational systems is difficult to evaluate. It is true, however, that the proportion of young men and women who reach higher education is lower than in the United States and Japan, that European universities are often disconnected from economic life and produce both masses of dropouts and masses of people without adequate skills, and that contacts and exchanges between the national educational systems remain far too skimpy. One often gets the impression that European leaders and part of the elites are torn between a technological "discourse" that stresses the need to climb aboard the train of the new technologies, lest Europe become obsolete and irrelevant, and a cultural tradition that still despises the disenchanted world of profits, production, money, and merchandise, still dreams of art, prowess, the life of the mind for the mind's sake, and criticism of society rather than prosaic adjustment to and marginal reforms of it. This is, to be sure, one of Western Europe's glories. But reconciling its aesthetic-aristocratic inclinations with its modern economic and social logic has never been easy, and the tension once again acts as a brake. Nothing is more fascinating than seeing so typical a product of the cultural tradition as Mitterrand trying to become the champion of the new modernity: the emphasis on invention, creativity, and scientific innovation impresses as a skillful way of reconciling prowess and production, but by itself it can resolve neither the issue of unemployment nor the crisis of the French educational system.

III

The relevance of these considerations to the subject of European-American relations may not be obvious—yet it exists, because the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

West Europeans bring to their dealings with Americans a mix of feelings that the latter ought to understand better. The West Europeans know their weaknesses; they are masters of self-criticism, and they would like to be able to concentrate on these threats. Thus they resent calls to disperse their efforts further (just as, eleven years ago, they disliked Kissinger's call for a "new Atlantic Charter" at a time when they wanted to focus on building the European Community, after years of stalemate followed by Britain's troublesome entry). They resent even more American moves that in their eyes worsen Europe's diseases. And they know enough about, or console themselves enough with, their own successes—the survival of their political systems despite economic turmoil and social stress, the resistance of the EEC despite national divergences and overall heterogeneity, the brilliant performances of a number of European enterprises both in Europe and abroad—to be supremely incensed by American expressions of contempt. Rostand's Cyrano would have understood this: it is one thing for Europeans themselves to denounce and dissect their continent's decadence, but quite another for Americans—be it *Newsweek* or Mr. Eagleburger—to pick up the same tune. Moreover, the European situation creates one more factor of inequality between the two sides of the Atlantic. The Americans' specific grievances are merely aspects of a general diagnosis and denunciation of Europe's decline. A few years ago, some Europeans thought that they were witnessing a new "American disease,"[9] a shrinking of the virtues that had made the United States a model for postwar Europe. Political indecision, the pressure of short-term financial factors in industry, a "rising tide of mediocrity" in education, endless litigation, industrial decline, and so on—these were the new realities. Today, in Western Europe, whether or not one likes it, and whether or not one admires its effects, there is no doubt about America's new dynamism, competitiveness, and (so far) recovery. This gives to the Europeans' own recriminations either (usually) a certain defeatist quality, or else, in the milieus of virulent anti-Americanism, a quality of rage; in both instances, a note of hopelessness creeps in.

What do the West Europeans complain about? One can distinguish three categories of reproaches. The first, in the economic realm, consists of accusing the United States of harmful irresponsibility. In the days of Jimmy Carter, there was anger about American

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pressure for deficit spending in the Federal Republic, about the effects of Washington's "benign neglect" of a falling dollar and rising inflation. The United States, as the leading economic power in the world (not because of its position in world trade but because of the role of the dollar, of the American financial market and banking system) was guilty of not taking into account the external effects of its domestic economic policies. This is still—more than ever—the charge today. But now the villains are the strong dollar, the high American interest rates, and the U.S. budget deficit. Imports into Western Europe that have to be paid for in dollars—such as oil—have become more expensive, and while European exports are in principle helped by the high rate of the dollar, much of this advantage is wiped out by the drop in the capacity of developing countries to import goods from Europe: they "must engage in restrictive import policies because of their debt problem."[10] Moreover, America's interest rates drain Western Europe of capital and delay Europe's economic recovery by obliging governments to raise interest rates to slow down the outward drain of their nations' funds. The U.S. government's refusal to intervene to push the dollar down is seen as both an act of shortsighted selfishness and a contribution to domestic pressures for protectionism coming from American industries that do badly when faced by European, Japanese, and Asian competition. Finally, insofar as the budget deficit threatens the American boom, it reduces the chances for an export-led recovery by the European countries, and contributes to the drain of European capital. The American standard answer of the past four years—"in the long run, our victory over inflation and our subsequent recovery will benefit you all"—is seen as a mark of arrogance; but the West Europeans know they can only complain—and wait.

A second set of recriminations deals with the Reagan Administration's foreign policy. To be sure, there are more than nuances, not only between the views of European governments and those of opposition parties, as well as sizable parts of the public (the governments are less critical of Washington on the whole), but also among countries. The French political class and intelligentsia, for complex reasons that deserve a study of their own, have reached a broad enough consensus around the view of the Soviet Union as an evil empire, to coin a phrase; and a wave of pro-Americanism has risen as a result. This has been reenforced by a sudden revival of French

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

anxiety about West Germany.[11] In the post-Adenauer period, the French fear was about Bonn becoming too pro-American, that it would be America's second Trojan horse in Europe (after England), leaving no breathing space for France. In 1983 they feared that the Federal Republic was drifting away from Western Europe and the United States. They realized that France and the United States had a common interest in keeping the West German dachshund in the Atlantic kennel, away from the East German dachshund in the Eastern cage.

Nevertheless, the criticisms that follow are shared by most varieties of Europeans, the pro-Reagan as well as the anti-American ones. Even those who are worried by Soviet expansionism and military power have doubts about a view of the world that reduces it to the Soviet-American conflict and either treats all conflicts in terms of that contest or dismisses as irrelevant those in which Moscow and its clients play no role or cannot hope to gain. Even those who believe that the Soviet military buildup in Europe is not purely defensive, but is aimed, at a minimum, at political intimidation, and that insofar as relations with Moscow are concerned, containment, deterrence, resistance, and vigilance must never be relaxed (and who therefore found the first years of the Carter Administration baffling), believe also that the concern for the global and regional balance of power must be accompanied by serious efforts at a political dialogue with Moscow, at arms control negotiations, and at preserving economic links with the Soviet Union and Eastern Europe. (The grain deal signed by Washington after the lifting of the embargo by Reagan is seen in Western Europe as a shining example of U.S. double standards or contradiction between rhetoric and reality.) On all these points, Reagan's policies have been found disturbing. No West European leader, Mitterrand included, wants to endanger the limited but important results of the Soviet-West European détente. West Europeans realize that the Soviet-American détente is dead, and have often asserted that it was divisible; they know, however, that the European détente could not survive a considerable worsening of U.S.-Soviet tensions, and they are not reassured by the drift of superpower relations.

There are also more specific, if diffuse, criticisms of American policy in the Middle East and in Central America, along the same lines. In the Arab-Israeli conflict, a policy that minimizes or neglects

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the Palestinian issue and treats Syria as a foe one can only ignore or fight is seen as dangerous (and as ultimately good for Moscow), whether it is based on the notion of Israel as a bastion or on the myth of an anti-Soviet "strategic consensus." In the case of Central America, even those who share Washington's analysis of the Sandinistas and of the danger of Marxist-Leninist regimes worry about a policy that neglects the domestic causes of turmoil in El Salvador, hardens the Sandinistas through massive attempts at subversion, and locks itself into the dilemma of "covert and indirect military action or overt armed intervention"—as if these were the only conceivable alternatives to "bugging out." Many West Europeans—Socialists as well as Christian Democrats—know the scene well and have grave misgivings about either U.S. entrapment or American self-fulfilling prophecies.

Another political complaint embraces all the others, that concerned with American unilateralism. Many Europeans in the late seventies lamented Carter's indecisiveness and hoped for a more coherent foreign policy and a stronger America at home and abroad. They are shocked to discover that the champions of a stronger America, who are now in charge, have even fewer inhibitions about unilateral decisions, fewer inclinations toward a jointly decided strategy (which is not the same thing as consultations about enforcing an already set policy) than the leaders of the mighty America that dominated the postwar period. In order to explain this unwelcome surprise to themselves, West Europeans tend to argue that it is caused by the shift of demographic and economic gravity from East to West in the United States, the decline of a political class dominated by the WASP (and Jewish) Eastern establishment, and the ascendancy of the Sunbelt—but while these are all real, there is no evidence that the new unilateralism is the product of regional differentiation, sharper in one part of the country than elsewhere.

It would be even harder for many Europeans to face the fact that they are victims of a mental sea change rather than of a geographical shift. And yet the same "explanation" cannot hold for the third major American tendency that many in Europe deplore: the tendency away from the reassuring ambiguities of NATO's doctrine of "flexible response" (adopted in 1967 after years of U.S. persuasion and pressure). What many West Germans, for instance, accepted only reluctantly in 1967, because it seemed to them less reassuring

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

for Europe than the discarded doctrine of "massive retaliation," is now desperately defended, especially in France, whose officials, in the early sixties, had found in America's change of dogma a proof of unreliability and an additional reason for the *force de frappe!* After all, NATO's post-1967 doctrine has been challenged first by perfect representatives of the old Establishment: the "gang of four" in 1982, George Ball and Irving Kristol in 1983, and Henry Kissinger for several years.

The realm of European security is by far the most confusing: not all Europeans charge the United States with the same sins, and they certainly do not propose the same remedies. It would not be wrong, however, to argue that many were able to rally around "flexible response," insofar as it did not seem to require too vast an effort at conventional defense *and* appeared to assure peace. The threat of an American first use of nuclear weapons was believed sufficient to deter the Soviets from either conventional or nuclear attack in a world in which the use of atomic weapons was likely to lead to "mutual assured destruction."

What West Europeans are still in the process of discovering is that the fools' paradise of peace through the threat of total destruction is being undermined by three developments. Technology provides each superpower with counterforce weapons that threaten the vulnerable nuclear forces of the other side: in a crisis, whereas invulnerable countercity weapons (or tactical weapons with limited counterforce capabilities) seemed to ensure "crisis stability," each side now has potent weapons it has reasons to want to use first, before it loses them to an enemy strike. Moreover, the precision of counterforce weapons—and their abundance—may encourage the military and statesmen alike to believe that nuclear wars can be fought and kept limited—for instance, in Europe. Conversely, the fear of crisis instability and doubts about the possibility of controlling a nuclear conflict create pressures for giving up nuclear threats altogether (especially since, in an age of parity, they appear like a bluff—who would really want to initiate a suicidal strike?) and for reserving nuclear weapons for the deterrence of nuclear attacks only, at most. Consequently, the superpowers ought to fight only conventional wars, if at all.

All three possibilities scare West Europeans, for all three spell doom for them. To many who have been demonstrating noisily, the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

introduction by the United States of rather vulnerable "Euromissiles," capable of either performing "decapitating" strikes or of hitting Soviet missile silos, was seen not as a reassuring way of buttressing nuclear deterrence nor as a way of proving to the Soviets that the defense of Western Europe is "coupled" to that of the United States, but as a reckless contribution to crisis instability—turning Western Europe into a target for nuclear preemptive attack. Some even thought, despite all reasonable arguments to the contrary, that these deployments might somehow allow the superpowers to keep a nuclear war limited to Europe (although if the United States wanted to spare the Soviet Union, it did not need to install missiles capable of hitting Russia; still, could one ever be sure that a Soviet nuclear attack on the "Euromissiles" only would be followed by a U.S. attack on the territory of the Soviet Union?) Others still—those who had asked for and supported the deployments—were deeply disturbed by American criticisms of the first-use strategy and by calls for giving up not only the use of nuclear weapons, but the threat of using them against a Soviet conventional attack as well. Had these Americans forgotten the merits of creating uncertainty for the potential aggressor? If Americans argued that the Soviets could anyhow never be sure that NATO would not resort to nuclear weapons rather than accept conventional defeat, and that this sufficed to preserve nuclear deterrence, why, then, repudiate the threat explicitly, and thereby either reduce the Soviets' margin of doubt or confuse them into taking high risks? Thus the missile deployments undertaken by the Americans brought home to many Europeans the ghastly possibility of nuclear war that technological developments on *both* sides had theoretically created—and led them to blame the Americans for it. Those Europeans who thought that these new deployments would, on the contrary, consolidate nuclear deterrence which Soviet deployments had, in their opinion, weakened, were aghast when Americans suggested that extended nuclear deterrence was no longer plausible and must be limited to the case of enemy nuclear attacks: Weren't Americans taking back with one hand what they had begun to give with the other?

Americans, it seems, were being accused both of being nuclear pyromaniacs and of getting cold feet about nuclear deterrence. It was hard for them to realize that these conflicting charges amounted to one common, central complaint: "*You* are undermining a reassur-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing notion of nuclear deterrence that has allowed us to live and do business in peace." But even if they had understood this more clearly, they would still have resented it. For in their eyes, of course, it was not America that was undermining the old strategy and killing the dream, but the evolution of technology, of the nuclear balance, and above all, of the Soviets, who had relentlessly striven first for parity and then for counterforce strategic and intermediate weapons that the United States itself did not have—and thus for some form (meaningful or not, but who could tell?) of superiority.

IV

Since the beginning of what has turned out to be their most lasting and entangling alliance, Americans have resented European complaints. They have pointed out that they were providing the main ingredients of Western Europe's security, after having provided for its economic recovery. The grand contest between Washington and Charles de Gaulle in the sixties produced profound bitterness among American officials exasperated by the General's casual charges about America's great power imperialism and unreliability. West European questioning of America's reliability in the realm of defense has always provoked angry answers. The United States, after all, still has almost three hundred thousand men in Europe thirty-three years after the installation there of divisions nobody thought permanently fixed, to say nothing of the several thousand American nuclear warheads there.

Today, however, American complaints are not just reactions to their allies' accusations or laments. There is a kind of global indictment of Western Europe's behavior, beliefs, and evolution. Here, also, one can distinguish three groups of recriminations. The first has to do with the shift in America's global priorities. From 1939 to not so long ago, Western Europe was the privileged continent—the highest foreign priority. Even though the Second World War began for the United States when Japan attacked in the Pacific, the European front received precedence. The Marshall Plan and the North Atlantic treaty demonstrated the importance Washington attached to Europe's economic recovery and security. The community of values was celebrated and defended. Today, many Americans believe that other parts of the world require greater attention than Western Eu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

rope. U.S. trade with countries of the Pacific now exceeds its trade with Europe; Japan has become the principal competitor—indeed, it has overtaken the United States in some important areas of technological innovation. In the realm of security, it is, paradoxically, Europe's very stability that drives attention away from it toward the multiple troubles of the Persian Gulf and the Middle East, and toward the new regional strategic system that has emerged in Northeast Asia. There, the Soviets have accumulated troops and SS20s; the Chinese are continuing their efforts at defense: the Japanese are increasing their own; and the United States is reenforcing its military presence—including sea-launched cruise missiles. Now, Central America has been declared a vital area, part of the U.S. "front yard."

The problem of priorities both affects and stems from American views of Europe in two respects. First, this shift is linked not only to a shift in perils and opportunities, but also to a judgment about Europe's decline. Some see it primarily in economic terms: the West German miracle is over, Western Europe in general has missed the train of the new technological revolution and has let it be driven off by Japanese and Americans, thus condemning itself to becoming an economic dependent. Western Europe represents the past; it will be a museum, not an engine. Others go further in their indictment and blame the West Europeans' social systems, the sterility of their higher education, the weight of their welfare institutions, the excessive and clumsy role of the state, and the rigidities of labor unions. Americans, it is well known, do not like losers, and today, Western Europe looks like one. The apparent inability to put the recession behind them, the sluggishness of their economies, and spectacular labor troubles in Britain and even in the Federal Republic contrast with Japan's dynamism—despite the oil shocks and the need to import every raw material—and with America's own classically brutal way of overcoming its economic troubles.

Second, Western Europe seems to be "turning inward" and refusing to behave as a set of countries with global interests or ambitions. It is their apparent refusal to support the United States in the other parts of the world that irritates Americans most. "We are protecting you; where are you when we need you?" The issue of NATO's role in areas beyond the geographical scope of the treaty was always a source of discord, but it mattered less when crises in those areas were discrete events. When most of the crises occur out-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

side the Alliance's range, the debate cannot help but heat up. If West Europeans appear to hide between the lines of the treaty, why should they expect to be treated as anything but regional powers? Furthermore, if they leave the main burden of policing the world to the United States, why should they expect Washington to treat the size of American deployments in Europe as untouchable? To be sure, the Japanese have not shown much greater enthusiasm for helping the United States in the Middle East, but they are not really expected to: the Middle East is far from Japan, and that country's first duty as an ally of the United States is in the Pacific, whereas Western Europe is close to the Middle East and often reminds Washington of its experience in, and ties with, the countries of that area. And the Japanese usually refrain from criticizing Washington, whereas the West Europeans do not. This is particularly grating with respect to the Persian Gulf, where many Americans—including presidential candidates—believe that they are primarily defending their allies' vital interests, and with respect to Central America, a zone traditionally covered by the Monroe Doctrine as interpreted by Washington. Kissinger's remark[12] about the allies' "rush to condemn our actions in Grenada" is characteristic: "They could hardly have wanted us to fail . . . rather they must have assumed that their actions were irrelevant and costless," a way of gaining favor with "Third World radicals abroad." Of course, the allies did not want the United States to *fail;* they wanted the United States not to *try*. But in the eyes of Americans, not trying meant resignation to losing, another form of Europe's addiction to "elegant failure" or graceful retreats.[13]

Thus Americans look with some amusement at the recent discovery by their European allies of the growing importance of Japan and of the new industrializing countries of Asia—in France, the existence of a second ocean has suddenly burst upon the consciousness of the elites; and they look with some indignation at the West Europeans' way of preserving the right to criticize the driver while they refuse to share the driving.

The second category of recriminations brings us back to Western Europe's own security. Not everyone in America who thinks about Western Europe believes that the allies are engaged in "self-finlandization." Interestingly enough, the charge, or suspicion, can be found most frequently among Americans of European origin who have not quite recovered from the shocks of the 1930s—European

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

appeasement, xenophobia, anti-Semitism, and occasional enthusiasms for totalitarian experiments. Nevertheless, the reluctance of practically all the allies to join the United States, since the watershed moment of the Soviet invasion of Afghanistan, in sanctions against Moscow, or against Jaruzelski's Poland, the way in which so many politicians seemed to want to preserve Europe's détente with Moscow from being contaminated by the superpowers' contest elsewhere, seemed to many Americans a mark of blindness and at least a predisposition to appeasement. The support provided by the key governments in London, Rome, and Bonn for the Euromissile deployments and, above all, the unexpected and spectacular endorsement of this policy by Mitterrand, have somewhat assuaged American fears. But in the smaller West European countries, divided governments have shown no comparable firmness; and some of the leaders, especially in Italy, have at times signaled that they would not mind compromises with Moscow that Washington would certainly find obnoxious. Moreover, many of the so-called pacifists or neutralists who have campaigned against deployment, particularly in West Germany, have both drafted a general, sweeping indictment of American society, culture, and political behavior (the charges being all too familiar to American ears, although they used to come more from France than from the Federal Republic: the harshness of capitalism; the treatment of blacks, Indians, the poor; the commercialism of cultural life; the corruption of politics by money; the military-industrial complex; American imperialism in the Third World; the ravings of anticommunism, and so on) *and* developed a benign interpretation of the Soviet Union as a conservative, somewhat stolid, status-quo power whose arms buildup is a defensive reaction to Western might.[14] This current, whose importance may well have been exaggerated by the American media (but which has deeply shaken the French as well), has of course not helped Europe's image as a reliable ally.

Specific strategic disagreements have sharpened the perception of the West Europeans as demanding and whining free-riders. In the realm of nuclear weapons, both varieties of West European criticisms have provoked indignation. On the one hand, the apparent blindness of the "pacifists" to the threat of the SS20; their tendency to emote only about America's middle-range missiles but not about the Soviets'; their argument about the United States forcing the Per-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

shing II and cruise missiles on Europe (whereas the process was initiated by Helmut Schmidt); their insulting charge about Washington planning a nuclear war limited to Europe—all of this has exasperated those in the United States who had decided to meet Schmidt's fear by sending the missiles, even though they themselves did not believe all of the arguments developed in West European strategic circles about the military importance of these weapons or about how much they were needed to "recouple" European and American security.[15] Many average Americans did not clearly perceive the fact that those Europeans who were noisily rejecting the missiles were not the same as those who had asked for them: the latter were officials; the former, members of the opposition or ordinary citizens. This (generally mistaken) view of European fickleness was reenforced by the spectacle of the German SPD's slide from Schmidt to the left.

On the other hand, those West Europeans who continued to support the deployments, particularly the French, and who shared American annoyance with the "pacifists," predominantly seemed to cling to the idea that only the threat of a first use of American nuclear weapons by NATO stood between the quasi-certainty of peace and a high risk of war. And the number of informed Americans who now believe in repudiating a first-use policy—openly or de facto—has grown spectacularly. There is a continuum, from Robert McNamara's precise demonstration of the intolerable likely effects of a first use, to Kissinger's statement that "the growth of Soviet strategic forces deprived general nuclear war of much of its credibility" (and while he still argues for trying to find some "rational military objective" to nuclear strategy, he has not indicated which), to Irving Kristol's merciless warning to the Europeans not to expect Americans to commit suicide for them, or to George Ball's equally blunt statement that no American president would actually order a first use.[16] The West European fetishistic reliance on such a threat strikes many Americans as either an ostrichlike stance, based on a refusal to look at the evolution of the nuclear balance and of nuclear technology, or else an implicit questioning of the deterrent effect of American conventional and nuclear forces on the Continent. Moreover, they note that the only nation that is being asked to risk suicide for others is the United States: the French, who are so upset

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

about no first use, have never offered to use their nuclear weapons first in case of a Soviet attack on West Germany.

If the threat of mutual suicide is no longer credible, the time has come to adopt a more sensible strategy. But, here again, a dialogue of the deaf has unfolded. Some American strategists believe that such a strategy could have a nuclear component, in the form of accurate discriminating counterforce weapons. But most Europeans (and many Americans as well) doubt that such a war could be controlled.[17] Many Europeans in particular still tend to believe that a threat of mutual destruction is a far more credible deterrent than a threat of counterforce nuclear war limited in scope: if this threat fails to deter, the strategy would ensure the destruction of Europe. Most Americans, however, seem to be turning away from any nuclear strategy toward a reenforcement of conventional armies in Europe. They ask their allies whether they do not understand that, should war come, a conventional one would be, for all its horror, preferable to a nuclear holocaust—and they are incensed at the Europeans' negative answer. What the Europeans know is that a conventional war would destroy them and leave America intact; and what they believe from history is that conventional forces are not a very reliable deterrent. Americans think that the combination of a conventional effort and the unavoidable risk of nuclear escalation would provide a sufficient deterrent against aggression. The West Europeans doubt it. Their interlocutors, who doubt that the *Soviets* could doubt it, therefore translate West European objections into a pure and simple refusal to do and pay more for a sensible strategy and a modern defense. West Europeans argue that NATO could never match Soviet conventional forces. Americans reply that you do not have to match in order to deter, or even to prevent the foe from winning (indeed, he will not attack unless he is reasonably certain he can win quickly). Again, the allies' refusal to accept this cheerful view is seen as a pretext for sticking to a strategy that saves them from further efforts and leaves the most fateful decisions to Washington.

There are, of course, Europeans who either sympathize with American arguments or understand that they signal an irreversible shift; and they recognize, therefore, the need for strengthening conventional defense. But they add that, precisely because its deterrent power is dubious, and Europe's objective is not to win if war comes, but to maintain peace, such an effort must be accompanied by at-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tempts to improve relations with Moscow. Many Americans see in this plea another escape into wishful thinking. Altogether, the West Europeans' reluctance to think through what should be done if deterrence fails, their way of clinging to various methods—all dubious—for ensuring the permanent success of deterrence, strike many Americans as another proof of abdication from responsibility. And to some, there is only a difference in degree, not in kind, between the pacifists who dream of an all-European security system, or of neutrality à la Sweden or Switzerland, and governments that seem to believe in perpetual cheap peace, that fall behind NATO's schedule of conventional improvements, and that often fail to "meet head-on the disturbing trends toward pacifism and neutralism in their countries."[18] The Nunn Amendment of June 1984, which ties the size of American forces in Europe to that of the allies' efforts in conventional defense, is an important warning shot.

A third group of complaints concerns Western Europe's apparent inability to meet the challenges of the last years of the century. It used to be the subject of an experiment that Americans passionately favored almost to the point of embarrassing their allies: the experiment in transcending the nation-state, in building a community with a single market, central institutions, and a common determination to bury past quarrels. The very pragmatism of Jean Monnet's *démarche,* his art of applying to Europe the lessons he had derived from his American experiences, delighted his many friends in Washington. To some, the Europeans' capacity to create a United States of Europe based on a functional-federalist model became a test of the allies' vitality and vision. American enthusiasm provoked de Gaulle's distrust ("If they want it so badly, can it be good for France and Europe?"). His own *démarche,* in turn, provoked American hostility. But there was still hope that the march toward unity would resume after his departure.

His exit and his death have only made more obvious the deeper reasons for the failure of the dream. Already when Nixon and Kissinger came to power, skepticism in official Washington replaced earlier proselytizing. The new leaders believed neither in the chances for West European unity nor in the necessary convergence of interests between the EEC and the United States, especially in economic and monetary affairs or in the Third World. Skepticism has been gradually followed by a mix of indifference and contempt. In uni-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

versities, for instance, interest in the complexities of European economic integration, legal harmonization, and institutional development has declined drastically. And those who watch closely the policy spectacle have been dismayed by the mix of acrimony and cowardice displayed by the EEC's members at the time of the oil embargo; by the Community's squabbling over the price of milk and Mrs. Thatcher's money; by its apparent unwillingness to allow Spain and Portugal to join because of the determined opposition of small but powerful farming interests; by the paralysis of the EEC's institutions; by the foreign ministers' habit of joint deploration and of giving advice without committing means. This brings us back to the issue of Europe's priority: Why grant it to a group of people who remain, of course, most important as a stake in the global contest, but who have failed to behave as if they wanted to become major actors again?

V

Writers who study European-American relations face a predicament of their own. They tend to highlight the disagreements and misunderstandings, and in recent years, they have often presented a diagnosis of very serious, if not terminal, illness—after which they offer either grand schemes devoid of any chance of success, precisely because the disease is not sufficiently advanced to induce the patients to try a drastic new treatment (and, indeed, also because the patient often fears that the cure might kill him off), or else placebos that, given the seriousness of the disease, appear inadequate.

I share the suspicion of grand designs; nostalgia for the postwar days of political creativity and community-building will not help us out this time. Two designs are currently being proposed. The first is a revamped version of the call for a "new Atlantic Charter" made by Kissinger in his "year of Europe" speech. Recently, both he and his old friend Helmut Schmidt have called for "a new grand strategy."[19] But there are interesting nuances. The former chancellor wants it, so to speak, on European terms. It must include economics—and when he speaks of "the global economic conduct" of the partners, it is rather clear that the curbs on inevitable "self-serving interests" would affect the United States above all. He also asks for an overall approach to the Soviet Union, one that would aim strictly

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

at equilibrium in the realm of arms and, "above all," entail a diplomacy of arms limitation to serve the balance. He makes it clear that the Soviets in other parts of the globe would remain primarily America's problem. None of this quite fits the moods of the Reagan Administration or indeed of the American people. Moreover, he acknowledges the profound differences among the West European countries; he criticizes the Americans for tending "to overlook the controversy and antagonism, as well as the numerous speech barriers, that have persisted for more than a thousand years," and the "differences in political status" among European powers. It is therefore not too surprising to find Kissinger presenting his suggestion of a global strategy, with an agreed-upon "optimum division of responsibilities," as the *least* likely outcome of any reexamination of the Alliance. To be candid, the Americans want helpers rather than partners, and are more reluctant than ever to commit themselves to a set of imperatives and restraints that would have to be managed jointly. They want the Europeans to share the driving, but not to share in the decision about the car's direction. And the Europeans, both because they know or suspect this, and because they have no great desire for global responsibilities anyhow—fearing that even in an honest attempt at defining them jointly, the United States would prevail—ultimately prefer the combination of freedom of (in)action plus recriminations about U.S. behavior.

The other grand design is more limited: it is an answer to West European fears in the realm of security and takes the form of suggestions about a common West European defense. This has become fashionable again; the French want to reactivate the one organization in Western Europe that has jurisdiction over defense questions, the West European Union. But the more one looks into the issues, the fuzzier the talk appears, for excellent reasons. No West European official—Mitterrand has been especially clear on this point: an important precision, coming from the most independent-minded member state—wants a West European defense entity to be a substitute for the Atlantic Alliance. Thus it can only be either within NATO, or next to America's forces in Europe. The United States would therefore retain its role as the "pacifier" of Europe.[20] But the functional scope of the West European defense entity remains difficult to imagine. If it deals with conventional defense only, the heart of the disagreements with the United States would remain un-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

touched, since they concern the place of nuclear weapons in the Alliance's strategy. Even in the conventional domain, two obstacles exist. One is the permanent American preference for an alliance that buys its weapons primarily in the United States—it is as if a deal had been struck in which the Europeans are allowed to be "inherently free riders when it comes to" the public good of defense,[21] in exchange for an American advantage when it comes to providing war material. The other obstacle is persistent French reluctance toward conventional defense. France's national defense stresses—still—nuclear deterrence of an attack on France. The French realize that a Soviet victory in Germany would put them in a dreadfully difficult position—for could a suicidal nuclear threat aimed at deterring Soviet conventional invasion beyond the Rhine be credible? (The majority of the French opt for negotiating with Moscow rather than carrying out the threat!)[22] Thus they understand that they have an interest in joining, in case of need, in the conventional defense of the West German *glacis* that protects France. But there is a double tension, between the emphasis on autonomy of decision and the need to plan participation in an "integrated" military structure, as well as between the financial priority given to nuclear weapons and the costs of a conventional contribution.[23] To be sure, the West Europeans could nevertheless better coordinate their armaments plans, build more weapons in common, and divide weapons production more intelligently among themselves, but this would hardly be very spectacular.

The domain of a common nuclear defense for Europe is even more troubled. It is not only because the British force is assigned to NATO whereas France's is not, or because even the MIRVing of these forces will not be sufficient to turn them into deterrents for Europe: they will, in fact, remain national deterrents (hence, opposition in London and Paris to having them counted in arms control deals between the superpowers). It is, even more, because of the problem of giving West Germany a "finger on the trigger": the right not just to veto a resort to nuclear weapons through a double-key agreement, but to take part in a decision to use them—and remember, it is the threat of such a use that many West Europeans deem indispensable for deterrence. Even if this could be resolved, can such decisions be made collectively? Above all, would the U.S. Congress and the president ever allow a West European entity to risk initiating global nu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

clear war by taking decisions that could force the United States to resort to its own nuclear weapons in Europe or lead the Soviets to attack U.S. nuclear installations in Europe? Of course, American decisions can drag Western Europe into nuclear war; and the Europeans who depend on the U.S. presence for their security cannot do more than fret. Americans have another option: pull out—or threaten to do so, in order to avoid such a situation.[24]

Some people on both sides of the Atlantic have suggested that the threat to pull out a sizable part of U.S. conventional forces in Europe, or their actual removal, could shock the West Europeans into establishing a defense entity of their own.[25] But this does not address itself to the nuclear conundrum, nor is it certain to have the desired effect: it would probably sharpen existing differences between the West Europeans—and in this case, the "pacifier" function would be affected. There are today three groups: those who agree, more or less reluctantly, that more has to be done in the conventional domain; those (the French) who cling to a nuclear Maginot Line despite rising misgivings; and those who would actually stress defense altogether less and seek security in "dialogue" with the East or in unilateral disarmament or "alternative" designs. As long as this division persists, European defense will be the contrary of Alsace-Lorraine in French affairs after 1871—always talk of it, never think of it. Thinking of it only shows how trapped Western Europe is in its dependence. A complete, self-sufficient conventional and nuclear defense is out of reach; a purely conventional one, without the Americans, would leave France and Britain largely out and doom the rest to either instability or to a very minor role in world affairs; greater efforts within NATO will leave the keys in America's hands.

Must we, then, come to the placebos? The problem is that even minor or fragmentary measures may prove as controversial as grand institutional schemes. For instance, making the Supreme Commander in Europe a European, and the Secretary-General of NATO an American, is unlikely to reassure the West Europeans, as long as these switches would be subordinated to a European acceptance of a "full conventional defense" and leave the United States more in charge of political strategies than ever.[26] A few things can probably be achieved, and they are not insignificant. The United States could preserve deliberate ambiguity about first use; one can hardly expect American officials to brandish the threat, but one can ask them to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

understand the benefits of uncertainty. In exchange, the Alliance should take measures that would make it possible, if nuclear deterrence fails, to postpone the use of nuclear weapons as long as possible against a Soviet conventional attack (this entails a relocation and reduction of the stock of tactical nuclear weapons).

As soon as one goes further, trouble begins. Of course the West Europeans should "assume the major responsibility for conventional ground defense." But even if their economic recovery proceeds faster and is more evenly spread than at present, one cannot expect them to change the balance between welfare and defense expenditures as drastically as the United States has done. This was easier to accomplish because the United States had never really become a welfare state. Of course, if state revenues should increase through economic growth, more money could go for defense in Europe. But the problems of structural unemployment, the cost entailed by supporting part-time work, the imperative of helping finance the new technologies, and the burdens imposed by heavy public debts will not leave very much for increased defense efforts. Conversely, none of the strategies Americans are offering for conventional deterrence and defense are likely to delight their allies. If greater mobility and maneuver means retreat first, after being attacked, and resupplying and reconquering later, the West Germans cannot be expected to be pleased. But if it means a quick counteroffensive in Eastern Europe, they will not be pleased either, since they want to avoid anything that might disturb their conversations with the East Germans or seem threatening to the Warsaw Pact (and would sending West German forces deep into Central or Eastern Europe be the best way to lure the satellites away from Moscow?). As for the miracle cure of precision-guided weapons, they may, of course, be helpful, but technology is no panacea—especially when one faces an enemy who is determined not to fall behind.

Many Europeans believe that the Alliance's trouble would be eased by a less confrontational American policy toward Moscow, and by less half-hearted American efforts at arms control. Much of this is true. But even a less militant U.S. administration would face two obstacles. First, it is not easy to define a policy toward Moscow that avoids both the perils of confrontation and the illusions of the détente of the 1970s. Détente without illusions, or the search for a modus vivendi, or regulated competition, which writers such as

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Marshall Shulman, Joseph Nye, Jr., Seweryn Bialer, Robert Legvold, myself, and others have advocated,[27] is easier to suggest than to spell out, easier to evoke by describing what it should not be than to substantiate it. When one rejects condominium, acknowledges the obstacles to more extensive economic links, and takes into account domestic difficulties on both sides, how much is left? Arms control, of course. But, on the one hand, it cannot be the only component of Soviet-American cooperative relations (for when this happens, it succumbs under the weight of the antagonistic ones), and, on the other, the speedy development of new offensive and defensive systems is likely to make agreements technically even more difficult and ever more complex.

Are Americans and West Europeans thus doomed to drift and divorce? What I would recommend, given the realities, is resignation to the inevitable—a loosening of ties, in order to preserve the indispensable—the alliance for the defense of Western Europe. For I do not believe that the realities described here can be easily reversed. To be sure, Western Europe could emerge from its protracted economic and social mutation and prove that it is not condemned to obsolescence, left behind by Silicon Valley and MITI, dragged down, so to speak, by the Pacific and by pacifism. *Le pire n'est pas toujours sûr.* Even the EEC could pull itself together. But I am afraid that even the best will not be quite good enough, that Western Europe is like a racer in a marathon who cannot quite get rid of a variety of chains and heavy equipment that weigh him down. Whatever domain one examines, one comes to the same conclusion: national efforts, however brilliant (few people believe Italy would manage its affairs so well) are not enough; and a collective will just is not there. It would require, among other things, the combination of these two: a complicity among the major West European leaders comparable to the relation between Adenauer, de Gasperi, and Robert Schuman (the Pompidou-Heath-Brandt trio was weaker because the first of these never quite understood or trusted the third), and, in the various countries, enough of the right sense of distress to allow these leaders to try and invent "Europe." Distress, today, is of a different kind: it has to do with specific interests, or else it looks for scapegoats or makes (mainly young) people want to drop out—it is fragmented or anarchistic (or unsocial), and therefore unproductive. As for the leaders who are likely to take over in the near future, they

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

all appear rather intensely national. Thus, we must expect, for instance, Europe's elites, in foreign affairs, to remain oscillating between the kind of impotent, bombastic (yet sincere) antitotalitarian posturing that now prevails in the French intelligentsia, the temptation of turning inward denounced by Eagleburger, and a semisomnambulistic quest for normalcy on the world scene—not exactly what even Europe's best American friends wish to see.

As for America, one can, of course, hope that a second Reagan Administration, if this is what the 1984 election will produce, decides to choose a "centrist" course in world affairs. It may no longer feel, however, that it has to give to domestic considerations (including, most specifically, the public's reluctance to fight protracted ground wars) the same priority as in the president's first term. That priority, which General Haig resented, underlined the contradiction between a domestic project entirely devoted to restoring private initiative and to curbing the state, and a view of the world as a struggle between good and evil, which requires a very strong and active American state. The factors that explained the priority of internal concerns were the need for reelection and for economic recovery. One will no longer be there, and the second might be less demanding. A militant second term would exacerbate European-American tensions. But even a "centrist" one would not eliminate them.

Two American features strike me, if not as permanent from now on, at least as likely to endure. One is the advent of leaders (in politics but also in the business world) and of elites that will not accord to Europe the importance it had been given in the postwar period. This is the famous problem of the successor generation, and one ought not add much to the platitudes it has already provoked. It is not that the new elites are more attracted to the Pacific, as many Europeans currently believe. It is that they are both more turned inward themselves, more concerned with, or excited by, America's response to new technological challenges than their predecessors, *and* insofar as they worry about or act in the world, more "global" in their outlook. This is also what one finds among the students in college and universities today. The first business of America is America (and, to many Americans in high places, it is American business). The second is a world safe for America—and Europe, to use Paul Valéry's famous phrase, now looks, more than before, like a "small cape off Asia."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The second, and related, feature could be called selective unilateralism. It is definitely not isolationism (which the French still fear and somehow expect): very few people, among the educated and informed, want the United States to stop being a world power. Most, indeed, still believe that an attack on Western Europe should be resisted by American force. But three factors push toward a rather new way of exerting world power. One, bluntly put, is battle fatigue with internationalism, that is, with a way of handling world affairs through alliance cooperation, international organization, doing good for ungrateful "Third World" leaders, and apologizing for one's own power or values. There is a new assertiveness; one could already sense it in the early philosophy of the Nixon Administration. It was later reversed by Carter's emphasis on global issues and omnidirectional bargaining; but his fiasco brought unilateralism back with a vengeance. A second factor is the very transformation of the international system: the United States is no longer as dominant a power as in the late 1940s and 1950s, and cannot hope to control trends simply by committing itself all over the world through pacts and bases; and the world has become more turbulent. What is therefore required now is greater freedom of maneuver, more leeway in selecting where and when to intervene or fight, and with what means (it is not a coincidence that this also happens to be a time of grand naval rearmament: it is a sea power's strategy). Interestingly, even those worried Americans who are more disturbed by the perils abroad than by the opportunities, more concerned about moderating turbulence than about American mastery of it, more anxious about nuclear war than about Moscow, spontaneously act out their own unilateralism, as when they call for a nuclear freeze that many West Europeans deem oblivious of nuclear imbalance in Europe, or for a no-first-use stand.

The third factor is precisely the domestic mood and system. The mood is one of profound ambivalence: patriotism is up, reluctance toward "new Vietnams" is not down. (It is wrong to talk about the Vietnam syndrome: the Korean War was not any more popular. It is endless, inconclusive, "limited" wars that are hard to "sell.") Distrust of Soviet expansionism is very high; the fear of nuclear war is more explicit than anywhere else. Again, the only synthesis for these contradictions is selective engagement, preferably quick and decisive action, and definitely not nuclear or capable of provoking a nuclear

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

response. This is not made to please the West Europeans, with their dogged concern for American ground forces *and* willingness to use nuclear weapons. As for the incoherence of the American foreign policy process, so eloquently denounced by George Kennan, it leaves room for only two alternatives: either the kind of strategy he has always advocated, based on a limited but stable definition of the national interest, and also relying a great deal on the self-interested efforts of those whom the United States protects; or selective unilateralism, which is more capricious (*vide* Grenada!) but more in conformity with the discontinuities of the political system, more adapted to the recurrent bouts of self-fascination or self-absorption, more pessimistic (or realistic) about the capacities or reliability of others, more in harmony with the current mood, with the desire for both globalism (every apparent Soviet gain anywhere being chalked up as a defeat) and freedom of action.

"Things being what they are," as de Gaulle used to say, there is no need to fear a collapse of the Alliance, but no way of concealing its devaluation. It remains necessary to both the United States and Western Europe—indeed, "pacifism" on either side and U.S. exasperation do not seem to challenge the legitimacy of NATO. Even West Germans who dream of denuclearized zones, defensive areas, and a Europe emancipated from both superpowers recognize that this is *Zukunftsmusik*, and that the music of today remains NATO's somewhat cacophonic military march. Even Americans who dislike Western Europe's "greedy" economic deals with Moscow, as well as moans and groans about American rashness, recognize that the United States has a vital interest in Europe's security, and that a Western Europe that is not prosperous will contribute even less to the common defense.

But note the narrowing of concerns. Many say they are willing to protect Europe, not because it is Europe that is being threatened, but because it is threatened by the Soviet Union.[28] Many Europeans say they need NATO, but only for their continent's protection, not in order to defend "Western" values and interests all over the world. It is not easy for Americans to accept the idea of a limited partnership in an "interdependent world," where many areas may be far more explosive than Europe. But they will have to. Many Europeans, in turn, will not find it easy to accept American unilateralism in these areas, or America's increasing unwillingness to listen to its allies before de-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fining its policy toward Moscow (except when *not* listening could have self-destructive effects, as in the squabble over the gas pipeline). But they will have to. Both sides will find it difficult to manage a military alliance whose strategy will be a compromise between conflicting fears, rather than a clear and decisive choice, one that will probably entail large, shadowy areas of ambiguity. But they will have to. And the reason is simple: anything else will not be any better for either side. As one French prime minister once put it to his contentious and divided majority, "We are condemned to living together."

No such uneasy conglomeration is entirely safe from the effects of massive irrationality: nations, as we saw in the 1930s, sometimes fail to defend their interests—or rather, define them in a delusive way. But—paradoxically—Europe is too fragmented to succumb to such a wave. And while one can concoct scenarios of American "abandonment" of Europe, it is more difficult to imagine the circumstances in which they would be played out than those in which a bungling America might drag Europe into a global war. One external force could strain the Alliance to the breaking point: the Soviet Union, should it revolutionize its foreign policy and suddenly offer to let its East European protectorates be "finlandized," in exchange for a West European reduction of dependency on NATO and the United States. But, until now, Soviet stolidity, brutality, fear of sacrificing well-established gains for uncertain possibilities, and unwillingness to run the risk of German reunification have carried the day.

As long as the Soviets, both through the pursuit of this durable policy and through the clumsiness of their attempts at driving wedges between the United States and its allies, contribute in their way to the preservation of the Alliance, there is no reason for anguish. But there is none for cheer either. The old bottle is only half full, and the wine is a bit sour. For the combination of Europe's mix of parochialism and impotence with America's mix of parochialism and arrogance is not a very pleasant brew.

ENDNOTES

[1]"Europe's Identity Crisis," *Dædalus* 93 (1) (Winter 1964). See also "Fragments Floating in the Here and Now," *Dædalus* 108 (1) (Winter 1979); and "Reflec-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tions on the Nation-State in Western Europe Today," *Journal of Common Market Studies,* September/December 1982, pp. 21-37.

[2]Commissariat General du Plan, *Quelle stratégie européenne pour la France dans les années 80?* (Paris: Documentation française, 1983), p. 143.

[3]In *Unemployment and Growth in the Western Economies,* edited by Andrew J. Pierre (New York: Council on Foreign Relations, 1984), p. 122.

[4]*Unsettling Europe* (New York: Random House, 1980).

[5]State expenditures represented 21 to 30 percent of the gross domestic product in Western Europe in 1980 (see *Eurostat,* June 1982).

[6]*Unemployment and Growth in the Western Economies,* pp. 45-46.

[7]This figure is mentioned in a French unpublished report, *La crise mondiale et l'avenir de la France,* prepared by a team from the Commissariat Général du Plan.

[8]In his speech in The Hague, February 7, 1984. See also Laurent Fabius, "Le défi technologique," *Politique étrangère,* January 1984, pp. 49-56.

[9]Cf. Michel Crozier, *Le mal américain* (Paris: Fayard, 1980), to be published in 1984 by the University of California Press under the milder title *The Trouble with America.*

[10]Raymond Barre, in *Unemployment and Growth in the Western Economies,* p. 71.

[11]In addition, the French Right admires President Reagan's domestic policies (as Jacques Chirac has put it, *"le truc de Reagan, ça marche, le truc de Mitterrand ça ne marche pas."*

[12]In "A Plan to Reshape NATO," *Time,* March 5, 1984, p. 21.

[13]Mentioned in a study of U.S. opinions about Western Europe, "Etats-Unis: solitude impériale," *L'Express,* June 1-7, 1984. By Dinah Louda, from which I have borrowed many points.

[14]See, for instance, the May 7th memorandum to the French "Left" prepared by a number of West German Socialist personalities, and published in *Le Monde,* May 20-21, 1984, p. 5.

[15]Many French political figures and authors appear to believe that "decoupling" was the result of John F. Kennedy's "deal" removing Jupiter and Thor missiles from Europe in exchange for the removal of Soviet missiles from Cuba. This new myth is now a companion of the older French myth about the deliberate division of Europe at Yalta by the superpowers.

[16]For Kissinger, see *Time,* p. 23; Kristol in *New York Times Magazine,* September 25, 1983, and in the debate "Should the U.S. Defend Europe?" *Harper's,* April 1984; Ball in "The Cosmic Bluff," *New York Review of Books,* July 21, 1983.

[17]See the debate over Albert Wohlstetter's views, in *Commentaire* 25 (Spring 1984): 43-65.

[18]Kissinger, *Time,* p. 24.

[19]See Helmut Schmidt, "Saving the Western Alliance," *New York Review of Books,* May 31, 1984, p. 27.

[20]Josef Joffe, "Europe's American Pacifier," *Foreign Policy* 54 Spring 1984): 64-82.

[21]Ibid., p. 81.

[22]See "Sondage Figaro-Sofres," in *Le Figaro,* December 1, 1983: in case of a Soviet invasion, only 6 percent would support the use of nuclear weapons; 58 percent would negotiate.

[23]The plan for a French *Force d'Action Rapide* does not resolve these tensions. See Pierre Lellouche, "L'après Pershing," *Politique étrangère,* April 1983, pp. 859-78.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[24]For further details, see my essay, "L'avenir de la défense européenne," *Intervention* 8 (February-April 1984): 80-84.

[25]Kissinger's idea of removing half of America's troops unless Europe agrees to "build a full conventional defense" (*Time*, p. 24) would leave one with the worst of all worlds: the strategy would still be based on a noncredible threat of nuclear war—the very thing he wants NATO to move away from—and there would be even fewer ground forces than now to ensure defense if the threat fails to deter!

[26]Ibid., p. 22.

[27]For several of these authors, see *The Making of America's Soviet Policy* (New Haven: Yale University Press, 1984).

[28]A point I owe to Dinah Louda's study (fn. 13).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Notes on Contributors

J. David Bolter, born in 1951 in Rantool, Illinois, is assistant professor of Classics, University of North Carolina at Chapel Hill. He is the author of *Turing's Man: Western Culture in the Computer Age.* In addition to his Ph.D. in Classics, Professor Bolter holds an M.S. degree in computer science, and for the past several years has been interested in studying the impact of the new electronic technology on the traditional humanities and the arts.

Alan Brinkley, born in 1949 in Washington, D.C., is Dunwalke Associate Professor of American History at Harvard University. Professor Brinkley's 1982 book *Voices of Protest: Huey Long, Father Coughlin, and the Great Depression* won the American Book Award for History in 1983.

Carol Gilligan, born in 1936 in New York City, is an associate professor at the Harvard Graduate School of Education. Professor Gilligan is the author of *In a Different Voice: Psychological Theory and Women's Development* (1982), *Remapping Development: The Power of Divergent Data* (forthcoming), and a series of papers on adolescent development, "From Adolescence to Adulthood" (1979); "Moral Development in the College Years" (1981); and "Problems in Adolescent Development" (1983). Her papers on morality and the social sciences include "Do the Social Sciences Have an Adequate Theory of Moral Development?" (1983).

Stanley Hoffmann, born in 1928 in Vienna, is Douglas Dillon Professor of the Civilization of France and chairman of the Center for European Studies at Harvard. His most recent books are *Duties Beyond Borders* (1981), *Dead Ends* (1983), and (as co-author) *Living with Nuclear Weapons* (1983). For the past year, Hoffmann has been on leave in Paris preparing a book on French ways of looking at America.

Richard Marius, born in 1933 in Martel, Tennessee, is director of expository writing at Harvard. His works include two novels, *The Coming of Rain* (1969) and *Bound for the Promised Land* (1976), and two biographies, *Martin Luther* (1974) and *Thomas More* (forthcoming). His latest book is *A Writer's Companion* (forthcoming).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Donald N. McCloskey, born in 1942 in Ann Arbor, Michigan, is professor of economics and of history at the University of Iowa. Professor McCloskey's works include *Economic Maturity and Entrepreneurial Decline: British Iron and Steel, 1870-1913* (1973), *Enterprise and Trade in Victorian Britain* (1981), and *The Applied Theory of Price* (1984). He has also edited numerous collections of British economic history. He is at work on a book about the rhetoric of economics and is about to launch, with others, a new journal, *The Rhetoric of Inquiry*. Professor McCloskey received an Institute for Advanced Study Fellowship in 1983.

Joshua Meyrowitz, born in 1949 in New York City, is associate professor of communication at the University of New Hampshire. He is the author of *No Sense of Place: The Impact of Electronic Media on Social Behavior* (forthcoming) and has written numerous articles and essays, including "Where Have the Children Gone?" and "Television and Interpersonal Behavior: Codes of Perception and Response." Professor Meyrowitz has served on the editorial board of *Et cetera* and is now on the editorial board of *Communication Quarterly*.

Janice Radway, born in 1949 in Englewood, New Jersey, is associate professor of American civilization at the University of Pennsylvania. Professor Radway is the author of *Reading the Romance: Women, Patriarchy, and Popular Literature* (forthcoming) and has published numerous articles on popular culture in *Feminist Studies, Journal of Popular Culture,* and *American Quarterly*, of which she is co-editor.

Robert Scott Root-Bernstein, born in 1953 in Washington, D.C., is MacArthur Fellow at the Salk Institute for Biological Studies in San Diego. He is the author of *The Ionists: Founding Physical Chemistry, 1872-1890* (1980), "Visual Thinking: The Art of Imagining Reality" (forthcoming), and "Paradigms and Revolutions in Science and Art." In addition to his historical and philosophical writings, Dr. Root-Bernstein has published about twenty-five articles concerning theoretical and experimental aspects of biochemistry. He is also an amateur artist, photographer, and cellist.

Victor F. Weisskopf, born in 1908 in Vienna, is Institute Professor Emeritus at Massachusetts Institute of Technology.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Issues of DÆDALUS in Print

These may be ordered at the current single issue price from the *Dædalus* Business Office, P.O. Box 515, Canton, Massachusetts 02021, U.S.A. (Tel) 617-828-8450. For bulk order prices, see order card this issue.

Nordic Voices *(Spring 1984)*

The Nordic Enigma *(Winter 1984)*

Human Rights *(Fall 1983)*

The Arts and Humanities in America's Schools *(Summer 1983)*

Scientific Literacy *(Spring 1983)*

Reading: Old and New *(Winter 1983)*

Print Culture and Video Culture *(Fall 1982)*

Representations and Realities *(Summer 1982)*

Black Africa: A Generation After Independence *(Spring 1982)*

Religion *(Winter 1982)*

America's Schools: Portraits and Perspectives *(Fall 1981)*

America's Schools: Public and Private *(Summer 1981)*

American Indians, Blacks, Chicanos, and Puerto Ricans *(Spring 1981)*

U.S. Defense Policy in the 1980s, Volume II *(Winter 1981)*

U.S. Defense Policy in the 1980s, Volume I *(Fall 1980)*

The End of Consensus? *(Summer 1980)*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Intellect and Imagination: The Limits and Presuppositions of Intellectual Inquiry *(Spring 1980)*

Modern Technology: Problem or Opportunity? *(Winter 1980)*

The State *(Fall 1979)*

Hypocrisy, Illusion, and Evasion *(Summer 1979)*

The European Predicament *(Spring 1979)*

Generations *(Fall 1978)*

Rousseau for Our Time *(Summer 1978)*

Limits of Scientific Inquiry *(Spring 1978)*

A New America? *(Winter 1978)*

Discoveries and Interpretations, Volume II *(Fall 1977)*

Discoveries and Interpretations, Volume I *(Summer 1977)*

Edward Gibbon and the Decline and Fall of the Roman Empire *(Summer 1976)*

Adulthood *(Spring 1976)*

In Praise of Books *(Winter 1976)*

Arms, Defense Policy, and Arms Control *(Summer 1975)*

Wisdom, Revelation, and Doubt: Perspectives on the First Millennium B.C. *(Spring 1975)*

American Higher Education: Toward an Uncertain Future Volume II *(Winter 1975)*

American Higher Education: Toward an Uncertain Future Volume I *(Fall 1974)*

Science and Its Public: The Changing Relationship *(Summer 1974)*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Twentieth-Century Classics Revisited *(Winter 1974)*

The Search for Knowledge *(Spring 1973)*

Post-Traditional Societies *(Winter 1973)*

How Others See the United States *(Fall 1972)*

Intellectuals and Change *(Summer 1972)*

Intellectuals and Tradition *(Spring 1972)*

Myth, Symbol, and Culture *(Winter 1972)*

The Future of the Black Colleges *(Summer 1971)*

The Historian and the World of the Twentieth Century *(Spring 1971)*

Historical Studies Today *(Winter 1971)*

The Making of Modern Science: Biographical Studies *(Fall 1970)*

Rights and Responsibilities: The University's Dilemma *(Summer 1970)*

Theory in Humanistic Studies *(Spring 1970)*

The Embattled University *(Winter 1970)*

Dædalus Dialogues *(Fall 1969)*

The Future of the Humanities *(Summer 1969)*

Ethical Aspects of Experimentation with Human Subjects *(Spring 1969)*

Perspectives on Business *(Winter 1969)*

Historical Population Studies *(Spring 1968)*

Students and Politics *(Winter 1968)*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

America's Changing Environment *(Fall 1967)*

Color and Race *(Spring 1967)*

Religion in America *(Winter 1967)*

Fiction in Several Languages *(Fall 1966)*

Tradition and Change *(Summer 1966)*

Conditions of World Order *(Spring 1966)*

The Negro American—2 (special issue, *Winter 1966)*

The Negro American—1 (special issue, *Fall 1965)*

The Contemporary University: U.S.A. *(Fall 1964)*

Themes in Transition *(Summer 1963)*

Perspectives on the Novel *(Spring 1963)*

The American Reading Public *(Winter 1963)*

Current Work and Controversies—2 *(Summer 1962)*

Excellence and Leadership in a Democracy *(Fall 1961)*

Twenty Years of *Daedalus (Index 1958-1977)*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Books Published from Issues of DÆDALUS

Many issues of *Dædalus* appear in expanded form, as hardcover books and in subsequent paperback editions. Those currently in print are listed below.

HARDCOVER EDITIONS

Reading in the 1980s, edited by Stephen R. Graubard. R.R. Bowker, 1983.

Religion and America: Spirituality in a Secular Age, edited by Mary Douglas and Steven M. Tipton. Beacon Press, 1983.

The State, edited by Stephen R. Graubard. W.W. Norton and Company, Inc., 1980.

Generations, edited by Stephen R. Graubard. W.W. Norton and Company, Inc., 1979.

Limits of Scientific Inquiry, edited by Gerald Holton and Robert S. Morison. W.W. Norton and Company, Inc., 1979.

A New America? edited by Stephen R. Graubard. W.W. Norton and Company, Inc., 1979.

Adulthood, edited by Erik H. Erikson. W.W. Norton and Company, Inc., 1978.

The Family, edited by Alice S. Rossi, Jerome Kagan, and Tamara K. Hareven. W.W. Norton and Company, Inc., 1978.

Doing Better and Feeling Worse: Health in the United States, edited by John H. Knowles. W.W. Norton and Company, Inc., 1977.

Edward Gibbon and the Decline and Fall of the Roman Empire,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

edited by G.W. Bowersock, John Clive, and Stephen R. Graubard. Harvard University Press, 1977.

The Oil Crisis, edited by Raymond Vernon. W.W. Norton and Company, Inc., 1976.

Science and Its Public: The Changing Relationship, edited by Gerald Holton and William Blanpied. D. Reidel Publishing Company, 1976.

Arms, Defense Policy, and Arms Control, edited by Franklin A. Long and George W. Rathjens. W.W. Norton and Company, Inc., 1975.

Slavery, Colonialism, and Racism, edited by Sidney W. Mintz. W.W. Norton and Company, Inc., 1974.

The No-Growth Society, edited by Mancur Olson and Hans H. Landsberg. W.W. Norton and Company, Inc., 1974.

Language as a Human Problem, edited by Einar Haugen and Morton Bloomfield.W.W. Norton and Company, Inc., 1974.

Myth, Symbol, and Culture, edited by Clifford Geertz. W.W. Norton and Company, Inc., 1974.

Intellectuals and Traditions, edited by S.N. Eisenstadt and Stephen R. Graubard. Humanities Press, 1973.

Post-Traditional Societies, edited by S.N. Eisenstadt. W.W. Norton and Company, Inc., 1972.

Twelve to Sixteen: Early Adolescence, edited by Jerome Kagan and Robert Coles. W.W. Norton and Company, Inc., 1972.

Population and Social Change, edited by D.V. Glass and Roger Revelle. Crane-Russak Co., 1972.

Historical Studies Today, edited by Felix Gilbert and Stephen R. Graubard. W.W. Norton and Company, Inc., 1972.

The Twentieth-Century Sciences: Studies in the Biography of Ideas, edited by Gerald Holton. W.W. Norton and Company, Inc., 1972.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED